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PSYCHODRAMATIC SHOCK THERAPY
A SOCIOMETRIC APPROACH TO THE PROBLEM OF
MENTAL DISORDERS¹

J. L. Moreno
Beacon, New York

SYNOPSIS

This paper presents a sociometric approach to the problem of mental disorders by means of the psychodrama. During lucid intervals of the psychotic attack or immediately after it the patient is stimulated by use of a warming-up process to throw himself back into the psychotic world. This upsetting experience is called "psychodramatic shock." The significance of the procedure is two-fold. It offers a research method for the study of the social atom in the psychoses, and thus offers a new frame of reference—the psychodrama, through which the deeper changes which take place in mental disorders can be understood. Secondly, it has a cathartic effect upon the patients. It enhances their spontaneity and creates barriers against recurrence. The treatment is illustrated by three cases—a schizophrenia, a manic-depressive psychosis, and a psychoneurosis.²

The outstanding problem in psychiatry is a therapeutic approach to the psychosis. This can not be attained with lasting

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1. The author is greatly indebted to Ernst Fantl, M.D., resident physician, Beacon Hill, Beacon, N.Y., for reading and assisting in the editing of this paper.
 2. Some terms used in this paper are defined as following:

Tele

A feeling process projected into space and time in which one, two, or more persons may participate. It is an experience of some real factor in the other person and not a subjective fiction. It grows out of person-to-person and person-to-object contacts from the birth level on and gradually develops the sense for inter-personal relationships. The tele process is the chief factor in determining the position of an individual in the group.

Auxiliary ego

A person whose function is to live through the subjectivity of the patient and identify himself with all the patient's expressions as far as organic limitations allow.

effects unless it is based upon a thorough knowledge of the psychological and sociometric structure of the psychotic world. Pharmacodynamic studies and treatments have come to the front today and are holding the interest of the psychiatrist. They may be able to return the patient to lucidity for a certain length of time, but they cannot have a permanent result unless the personality of the patient has been so adjusted as to prevent a slipping back into the psychotic confusion. Therefore, a method based on a new frame of reference, the psychodrama, has been worked out and is presented in this paper.

When the psychotic attack itself is in progress the mind of the patient is absorbed by an experience which the attending psychiatrist is at a loss to co-experience with him. If he does not satisfy himself with a symbolical interpretation of the patient's conduct, the clinical description he can truthfully give is scant. The psychiatrist may even suspect that the experience the patient undergoes is extremely rich in detail, intense in feeling, a world of his own, but he does not have any tool with which to reach into that strange world in which the patient lives. An approach in this direction can be made by psychodramatic technique. The patient is asked to throw himself back into the hallucinatory experience when it is still most vivid in his mind. He is not asked to describe it; he must act. He puts his body into the position as it was then and acts as he acted

(Footnote continued)

Networks

An inter-personal structure in which individuals comprising certain links are unacquainted with those in more distant links but can exert an influence by indirection.

Social atom

The tele range of an individual. The smallest constellation of psychological relations which can be said to make up the individual cells in the social universe. It consists of the psychological relations of one individual to those other individuals to whom he is attracted or repelled and their relation to him.

Warming-up process

A technical term derived from spontaneity work. The spontaneity state is brought into existence by various starters. The subject puts body and mind into motion, using body attitudes and mental images which lead to the attainment of the state.

Psychodrama

A therapeutic situation similar to the social situation of a patient. The patient is asked to relive a former experience by expression through gestures, words, and movements, and if necessary, to act with a group of auxiliary egos who represent to the patient certain rôles played by members of his social atom.

then. He may select any members of the staff to recreate the hallucinatory situations. The patient usually shows a violent resistance against being thrown back into the painful experience from which he has just escaped. His natural bent is to forget—not to talk about it. He is full of fears that his new freedom may be shattered. The mere suggestion and still more the actual process, frightens him. The psychodramatist is encouraging the patient to act, to throw himself into the psychotic state, to lose himself entirely in it, however awful, ugly and unreal it may seem to him at the moment.

The first psychodramatic acts are usually of short duration. The patient is experimenting, tapping around, until he finally gets hold of a situation. He may then appear to the physician exactly as he was when in his acute state. All persons who have been in contact with the patient during the first psychotic attack must co-act with the patient. They must stimulate his bodily and mental memories. Around the body behavior of the patient, numerous reminiscences flare up. A shaking and loosening of the patient takes place, and suddenly he is able to warm up to the mental states of which he was unaware before he began to act. The bodily states are the psychodramatic starters and guides of the patient, on the one hand, into the psychotic realm, and on the other hand, into a gradual integration and control of the rôles he played during the psychotic attack. The patient is no longer a helpless victim as he was formerly.

The technique of embodiment, soliloquy and immediate analysis of each act as soon as it is portrayed enable us to reconstruct the psychotic situation. In the psychodrama of the dream the patient portrays a situation in which he was asleep. Certain odd phantasies which passed through his mind may be re-enacted. But in the psychosis, however dream-like his experience may have been, he was acting towards real things and real people. Indeed, there is even a possibility that we may understand dream constellations better when our knowledge of the actual events in the psychotic processes increases.

The social atom is that peculiar pattern of inter-personal relations which develops from the time of human birth. It first contains mother and child. As time goes on, it adds from the persons who come into the child's orbit such persons as are unpleasant or pleasant to him, and vice versa, those to whom he is unpleasant or pleasant. Persons who do not leave any impression, positive or negative, remain outside of the social atom as mere acquaintances. The feeling which correlates two or more individuals has been called tele. The social atom is therefore a compound of the tele relationships of an individual. As positively or negatively charged persons may leave the individual's social atom and others may enter it, the social atom has a more or less ever-changing constellation.

In the original social-atom charts the ego of the patient was shown in relationship to his numerous partners. A more thorough consideration of the position of the individual within his social atom suggests considering him also in relationship to himself. As an infant grows he does not only experience other people but also experiences himself. As a result of this tele-relationship, he begins not only to feel himself, but also to see himself as one towards whom persons have acted in a certain way and as one who has acted towards them in a certain way. Gradually, he develops a picture of himself. This picture of himself may differ considerably from the picture others have of him, but it becomes considerably significant for him as life goes on. The gap between him as he is and acts and between the picture he has of himself is growing. Finally, it appears as if he had, besides his real ego, an outside ego which he gradually extrojects. Between the ego and his extrojection a peculiar feeling relationship develops which may be called "auto"-tele.³

The shape of the extrojection can be amorphous or clear-cut and sharp. It may have a close material resemblance to the real ego, or it may be a variation of it in some degree. It may be contrasting or even contrary. The relationship may be a feeling of acceptance and of accord, or it may be a feeling of rejection and discord. It may be a strong and powerful feeling, or it may be a weak feeling or even indifference. Therefore, the new social atom chart presents the center individual twice. The line between them portrays the "auto"-tele relationship.

In cases of complex personalities a patient may shape for himself more than one extrojection. A most fascinating illustration of this is the case of hallucinatory psychosis in which a break-up and distortion of the tele-relation takes place, a breaking up of the auto-tele. And with all this, a chaotic condition within the social atom of the patient develops. Out of old tele particles and perhaps some new spontaneously created ones emerging during such an unprecedented psychological upheaval through which the patient passes, numerous embryonic extrojections are produced. Various rôles crop up. Tele experiences from persons around the patient are synthetically combined with new particles which have for the observer an incomprehensible and confused appearance. But they are, as we know, not confused to the patient but extremely clear and real. Parallel to the breaking up of the auto-tele, all the tele between the patient and individuals and objects is breaking up; his social atom is in a state of revolution. It is not the sense of hearing, of sight, of touch, of smell and taste, not the alimentary and sexual urges which are disturbed as such. They are, in a sociometric sense,

3. Dr. Ernst Fantl suggested the term "auto-tele" as expressing the broad implications of the problem.

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disturbed in specific relationships with definite persons and things and in different degrees of intensity with each of them. With the gradual loss of the tele realities, the sense of time and space may also become blurred. As the psychological organization of time and space are disorganized the spontaneity states, instead of following one another in rapid frequency, producing the sense of time with the dimensions of a past and future, flow freely into space, since there is no barrier to prohibit this. Spontaneity turns, so to speak, into tele; and with it the projection, instead of into time, is diverted into space.

There is an old dogma in medicine that violent diseases demand strong remedies. There is nothing more violent and strange in the realm of human pathology than insanity in an acute phase. For the social atom, it is like a flood, uprising and submerging a town. The houses, the streets, may still exist somewhere underneath but the flood has risen so high that nothing can be seen or felt but water everywhere. During the sudden onset of an attack, the patient and the people around him alike are taken by surprise. It is an upsetting experience to the patient and to the members of his social atom, that is, it is a "shock." A procedure which throws a patient, barely escaped from a psychosis, into a second psychosis is a psychodramatic shock treatment. As a violent shock the acute phase of a psychosis is treated by another violent shock with material resemblance to it. Since a cathartic effect is expected from it, this recalls an old dogma in medicine: "*similia similibus curantur*."

Psychodramatic procedure tries to recreate the panorama of the psychosis. The break-up of the patient's social atom, his new experiences of his own self, the break-up of the auto-tele and its replacements, the replacement of the individuals and objects in the social atom by new constellations, come back into the bodily and mental experience of the patient. They also come back into the experiences of the physicians and nurses who are his partners in the act of reconstruction. Since they are able to enter, through the psychodramatic shock, the psychotic world of the patient, they are, on the one hand, able to investigate it guided by the patient; on the other hand they are able to guide the patient not to fear his own world but to understand it and to make it his own, if not a part of his manifest life, then a part of his psychodrama.

This is necessary because the process of returning to the common reality does not take place in the individual's organism proper. It takes place in the tele relationships within his social atom. From the point of view of a fully integrated personality, the tele formations existing during the psychotic attack have also to be brought back into the common reality. As long as unintegrated elements persist in some manner near the individual proper, or scattered within his social atom outside of his spontaneous controls, similar occurrences

may again upset his balance. The personality of the patient has to be safeguarded against any emergency; otherwise, he cannot truthfully be labeled recovered from his mental disease.

There is no moment during the procedure in which the psychiatrist and the patient cannot say "stop." Immediately or a few seconds after the order is given the patient may break up the procedure and act as if nothing had happened. These stop orders produce in the patient a significant co-experience. Acting on a psychotic level at a time when he is extremely sensitive, he learns to check himself. It is a training in mastery of psychotic invasions, not through intellectual means, but through a sort of spontaneity training.

In the history of the psychodrama, the Aristotelian concept of catharsis found its place in the spectator. The modern concept returns the place of catharsis to the spontaneous creator. The relationship between the creator and catharsis was not considered for a long time. The recipient of the tragic shock remained the person in the audience. The enormous possibilities of the psychodrama remained undeveloped. In the psychodrama, production is creation in the fullest sense. The subject has become creator of his own rôle, its author and actor at the same time. Consequently, he has become the recipient of the tragic shock.

Preliminary to the psychodramatic treatment itself, in the interview preparing the patient for the treatment, tracing with him the syndrome which may provide the material for the first shock situation; a form of catharsis takes place in the patient which operates largely on the intellectual level. It corresponds to forms of psychotherapy which try to cure through logical persuasion and suggestion (intellectual catharsis). Immediately after each act reflections take place to which there is a corresponding feature in the psychoanalytic approach. The relationship to the psychiatrist and to each auxiliary ego dominates (analytic catharsis). There are individuals who are as individuals well balanced; their difficulties center entirely in the sphere of their social atom. A negro patient, for instance, felt well, but as soon as he entered a restaurant for white people, he suffered from great anxieties which disappeared as soon as he left the locality. At times the tele relations reach far into the psychological networks of the community. Then all the individuals involved have to be considered in the treatment (social and network catharsis). Creative catharsis, intellectual and analytic catharsis, and social and network catharsis may each play a rôle in the different stages of the psychodramatic shock procedure.

The difference between the psychodramatic shock and other forms of treatment which are accompanied by upsetting experiences, such as the treatment with hypnosis or the chemical shock therapy,

is obvious. Hypnosis turns the patient into a state of sleep and insulin turns him into a state of coma; both procedures make the patient helpless and inarticulate. It is a shock—but in the dark. Psychodramatic procedure not only insists that the patient has to be awake and conscious but also insists that the patient has to reproduce with his own body and with the bodies of as many auxiliary egos as he needs that phantastic world into which he has been drifting. At times the reconstruction may have to be as confused as it was in the original psychosis. The psychodramatic shock is the only method which shakes the patient so deeply that the lost psychotic world is reborn before our eyes. The patient acting on the stage shocks himself, his "auto"-tele, and his social atom until it gives way to the pathological constellations of his psychotic state.

In the course of every psychotic attack there are many moments of relative lucidity. During any of these lucid moments an application of the psychodramatic shock may be considered. The ideal time for its application, however, seems to be after the attack has burned itself out immediately after its natural course has terminated. The outbreak and course of a psychotic attack are so far removed from any rapport that no other approach is able to give us direct information about the actual structure of these psychotic worlds.

For the demonstration of this new approach three cases have been selected, each representing a different category of mental disorder according to current classification—a schizophrenia, a manic depressive psychosis and a psychoneurosis.

CASE 1

M. F., an Italian woman of thirty years, had a sudden outbreak of her present mental illness a few months after her marriage. The patient had never been mentally ill before, but two members of her mother's family have been mentally ill. There have been several factors in the social setting of the patient which must be considered contributory factors. Her father, to whom she was deeply attached, died recently after a short illness. She and her father had always disagreed with her mother. She directed, single-handed, the father's business after his death. The cleavage in her own family group was accentuated by a cleavage in her sexual feelings. She was at once attracted to men and to women. When she fell in love with a Protestant boy, her mother, a Catholic, protested violently. This conflict led to a hostile division of opinions in the networks of the small community in which they lived. Shortly after the wedding, the patient says, a man stood, early one morning, in the window of her bedroom. "The man in the window" was probably her first hallucinatory experience. Within forty-eight hours she developed an acute psychosis which required her immediate hospitalization.

First Phase

The first acquaintance with the patient was made in an automobile which brought her to our hospital. The situation in the car was selected as the first situation to be recreated by the patient through psychodramatic procedure. On the left side of the page is presented the conduct of the patient during the automobile trip as recorded by a physician. On the right side of the page a reconstruction of the same situation is given by the patient on the stage of the therapeutic theater.

The patient sits erect in her seat. Staring ahead. Everybody in the car feels apprehension. Nobody speaks.

She looks at the doctor. Stares at him frightfully for a long time.

The car passes red traffic lights. The patient evidently becomes more excited.

The car passes a policeman. The driver asks him for directions.

They drive on for awhile. The patient jumps up—is forced back.

Suddenly throws her arms around her mother's neck. Speaks for the first time, saying: "Let us pray."

The patient sits erect in a chair on the stage of the therapeutic theater. She soliloquizes:

"It is dark as hell. Everybody looks so sinister. The devil is driving the car. Something terrible will happen."

She looks at the doctor, soliloquizing: "Who is this man? He looks like my father. But he does not move. He must be dead."

"I see so many red lights. What do they mean? Why do they put their heads together? They bring me to a house of prostitution."

The car stops. "They talk to a man. He is dressed like a policeman. But he looks like 'the man in the window.' He comes to kidnap me."

"The car is doped. Dope comes from every corner of the seats." Jumps up. "Why do they put needles into my leg?" Is forced back. "Why do they kick me? It hurts." Suddenly throws her hands around her mother's neck. "They want to crucify me. Let us pray."

ANALYSIS

The patient is agitated in the car. The clinical picture is full of gestures and actions but poor in verbal content. In contrast,

the psychodramatic shock reveals an invisible world rich in delusions and hallucinations. The patient acted in the car with few exceptions as if she were alone, shut in, as if the world around her were not existent. In the reconstruction we see a highly moving interpersonal drama in which every person in the car participates and in which many imagined persons and objects appear. Many incidents which the patient did not mention in the preliminary interview were discovered during the shock through "psychodramatic recall." It appears that in the process of action, of throwing her body and mind into a state of frenzy, avenues of recall were reactivated which could not be reached through a verbal interview. The starters for these recalls are often bodily starters. As the patient explained during the analysis: "When I jumped up during the act on the stage, for an instant I really felt the needles in my legs. That made me immediately shout in pain. When I was forced back on the stage by the nurse, I also felt suddenly a real kicking. And again I shouted in pain. After the act was over it went like lightning through my head that that is what had happened in the real situation in the car." The string of associations was apparently this: the jumping was associated with the feeling of the needles. And with this were associated the words "Why do they put needles into my leg?" The being-forced-back was associated with the feeling that she was kicked and with this the words: "Why do they kick me. It hurts."

The patient had been in the car about two hours without speaking. But according to her psychodrama she was actually living through many intense scenes in which many persons were involved, some actual and some imaginary, and in which her life was threatened. She spoke almost incessantly. She saw and heard, did and felt innumerable details.

We are here at a dilemma; an event cries for an explanation. We had observed some actions which she denied having made. On the other hand, she reported some actions which we are certain were never performed by her. As we have no reason to doubt the patient's sincerity we can assume that, due to the break-up of her acts, parts of them reached us at different moments without giving the impression of coherence. But she may have experienced them at one moment as parts of the same act. The break-up of her acts and the break-up of her social atom occur hand-in-hand. In fact they are different parts of the same process.

The mannerisms, stereotypes, speech imitations and other automatisms which appeared during this psychodramatic shock were recorded. These actions were found similar to the actions of the patient during her acute schizophrenia. The patient perspired profusely during the session. Every one present was apprehensive and feared that she may become insane again. For several hours afterwards she was withdrawn from reality. She was unable to report how

long the shock lasted, what movements she had made, in what direction, what her gestures had been, and what she had said. She appeared as if she were only half conscious during the act. This corresponds to the deep alterations in time and space which took place in the patient's mind between the real attack and its reproduction.

Second Phase

In the first shock the patient reconstructed an initial phase of her psychotic attack. In the second shock the patient reconstructs a later phase when the psychosis is in full development. Rapport with the patient was not possible. In the automobile she was full of fear. Now she is full of aggression. It was difficult for us to suggest a definite situation which she might construct because wide discrepancy was evident between what we remembered clinically and between what she produced psychodramatically. Whenever we told her what she had said or done she replied: "I did not say this, I did not do that. I do not remember." Thus we could not guide her into the shock. She had to guide herself. Instead of suggesting therefore a specific situation we tried to pin her memory upon a locality, the "middle room," in which she had been for about twelve hours.

Middle room:

Actual duration of this period, twelve hours.

The patient is stretched out on a mattress. The patient holds the nurse's hand tightly.

Two physicians enter the room. She smiles at Doctor A.

Frowns at Dr. B.

Psychodramatic duration, as experienced by the patient, several years. "When I came to this room, I was a young woman. When I left it I felt like an old woman."

Patient lies down on the floor. The same nurse takes part in the psychodramatic procedure. She holds the patient's hand. "She holds my hand. The hand is her hand, but the head is the head of my dead father."

Two physicians step on the stage. She smiles at Doctor A. "He is like a little boy, two years old, small in size. His voice is sweet."

She frowns at Dr. B. "He is dark, so big in size. How could he get through the door?"

She snatches with her fingers at Dr. B. and points down to the ground.

She breaks herself loose and begins to bang with her hand on the wall.

The patient shivers. She dips with her fingers into space.

She tears her sheet and pillow cases to pieces.

The patient is put into restraint. Her arms are stretched out. Her legs are crossed.

She snatches with her fingers at Dr. B. and points down to the ground. "This is your end. Dead."

She breaks herself loose and begins to bang with her hands on the wall. "It is an earthquake. It sounds terrific. I am a great magician. Houses are breaking down. People are dying on the street. This is the end of the world."

The patient shivers. "It is so cold here. There are many holes in the wall. The wind is blowing through them. It is a flood. Water must be everywhere. She dips with her fingers into space. Tries to touch the water: "I see the water and I touch it."

She indicates the tearing of her sheet and pillow cases. "This is my wedding dress. I have torn it to pieces now."

The patient lies down on the floor with outstretched arms and crossed legs. "I am crucified. I am Christ on the cross. My hands are bleeding. I see blood on the joints of my elbows, blood on my knees and blood on my feet."

ANALYSIS

The analytic outcome of the first shock was that the situations, actions and words recorded during the psychotic attack could not be used as starters by the patient for the shock procedure. The patient showed an almost total amnesia for many occurrences, which was extremely striking to the participant observers, physicians and nurses. She must use starters of her own, buried and meaningful in her psychodrama. She must play after her own key. An explanation of the causes producing this mechanism becomes possible through the analysis of this shock. The clinical observer has an amnesia for certain things which may remain a total non-experience. The patient has an amnesia for a different set of things. The second shock shows clearly the break-up of the patient's social-atom-

constellation and with it a break-up of the "auto"-tele. It is this break-up which may guide us to an explanation of the amnesia cleavage. The result of this break-up is:

The size of things and persons has changed. A knock on the wall sounds to the patient like thunder. Six feet look like two feet.

The shapes are changed. Some persons look swollen and curved. Some look faint, like a shadow.

The time pattern is changed. The dead father is alive and the living doctor is dead.

Duration has changed. Twenty-four hours become many years.

The ego has changed. It is replaced by such rôles as magician and Christ.

A "persona" is composed of parts which belonged originally to different individuals and topics. For instance, the hands of one individual are connected with the head of another individual. The outcome of the psychotic attack is like debris after an earthquake. Isolated elements whose original place is hard to detect and new combinations appear. The patient's social atom is smashed.

Third Phase

The patient was removed shortly before the attack from the "middle room" to a room next door to it. Since we could not construct any psychodramatic situation with which the patient would agree for reasons already explained, we left it to the patient to recreate herself in the mood she was in when she found herself in this new setting.

The patient is stretched out on a mattress. The nurse sits by her side. A glass of water is given to the patient. She grasps it so tightly that it breaks. The water falls on the mattress.

She closes her eyes.

The patient lies down on the floor. The nurse sits by her side. A glass of water is given to the patient. She holds it tightly. "I am here on a ship. I am the captain. I hold it tightly. The boat begins to sink. Cold water is all around me. We sink to the bottom of the sea."

She closes her eyes. "Now I am in a box. I am dead and safe on the bottom of the sea. It is so pleasant

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She cries like a baby.

She looks through a window. First, an expression of astonishment, then of bliss.

Calls her nurse incessantly with a plaintive voice:
"Stay with me."

here. Wonderful and quiet. All the water is above me."

"O, the box begins to rise. I rise with it higher. The box opens. I am reborn. I am an infant." Cries like a baby.

Looks through a window. "What a strange place in which I am. There is an open window. A beautiful tree full of leaves. The sun is so warm."

Pleads with gestures not to leave her alone. With a plaintive voice: "A wonderful face is on my bedside. It is the face of a woman looking at me. She feeds me. She takes care of me. She is so strong and big. I am so weak and helpless. Stay with me."

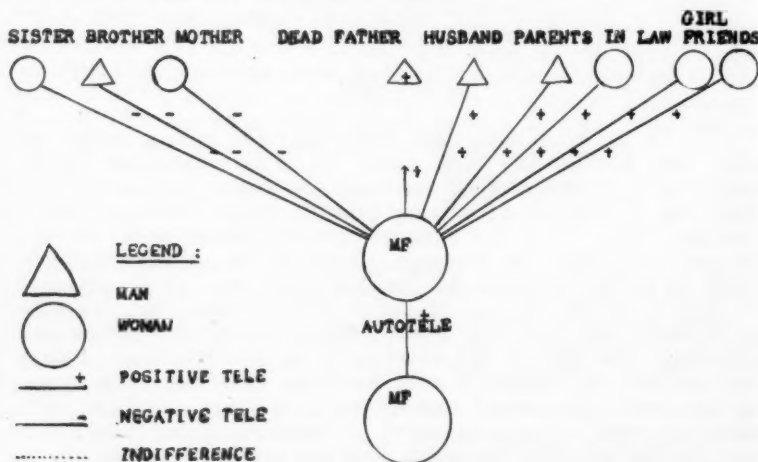
ANALYSIS

In the third shock, the patient portrays the act of her rebirth. She discovers the world again. It is an unbelievable world. Everything is so strong in it; the colors are deeper; the sounds are louder; the time is longer; space is broader; people are bigger and more important. It is this moment when the patient comes out of the acute state that has enormous possibilities for increasing our knowledge of the psychoses and for their catharsis. If the attack has come to an end the patient herself gives a signal that the bedlam is over. She feels "like new." She has a thrill which she never forgets. She looks at the world as if for the first time. Everything she sees and touches is more beautiful, more real, more exciting than ever. She herself becomes poetic, religious, exuberant with vigor. It is the normal response of an individual from whom a heavy burden has been removed. This moment is the crucial time to apply the psychodramatic shock. The more days and weeks go by the more the psychological navel-string, which binds her present situation to the psychotic world from which she comes, fades and finally breaks. But if the shock treatment has begun at the crucial time before it is too late the psychosis is kept alive in the patient. She develops a double relationship towards two different worlds. For many months the treatment can go on. Shocks are timed daily or as often as the treatment required. The shocks, one succeeding the other, hinder the patient from freeing herself prematurely from her illness. We prolong her illness artificially. We keep the psychosis alive in her. Being normal and "as if" psychotic, at the same time,

she develops spontaneous controls. The outside event has become a part of herself. It has found a tie to her own existence.

The third shock also portrays the period of infancy. The patient is in a state of great inferiority. She is threatened by everything from which she was safe during the psychotic attack. She feels dependent upon every person who protects her, preserves her life, feeds and loves her. The two persons, nurse and physician, who have taken care of her in this period of awakening, attain for her great authority and meaning. Later they became the natural agents to prepare and guide her into the difficult adventure of psychodramatic shock treatment. She follows them blindly into the psychosis just as she followed them blindly into the real world.

Sociogram I portrays the normal configuration of her social atom. Negative tele goes to all members of her family, positive tele to all members of her husband's family who are positively attached to her. Such a distribution of tele produces a cleavage between the



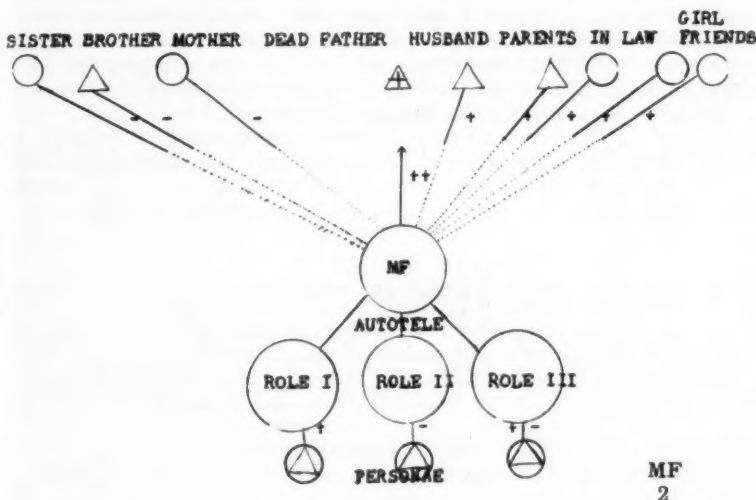
Sociogram I

MF
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two family groups. There is a positive tele for her dead father. It is charted because of his dominant rôle in the development of her psychosis. A positive sexual tele for two girl friends is indicated. The tele towards herself, the "auto"-tele, has the following characteristics: it is of clear-cut shape, positive in valence, strong in intensity and unbroken.

Sociogram II indicates that with the beginning of the acute phase of the psychosis all the interpersonal relations preceding it were,

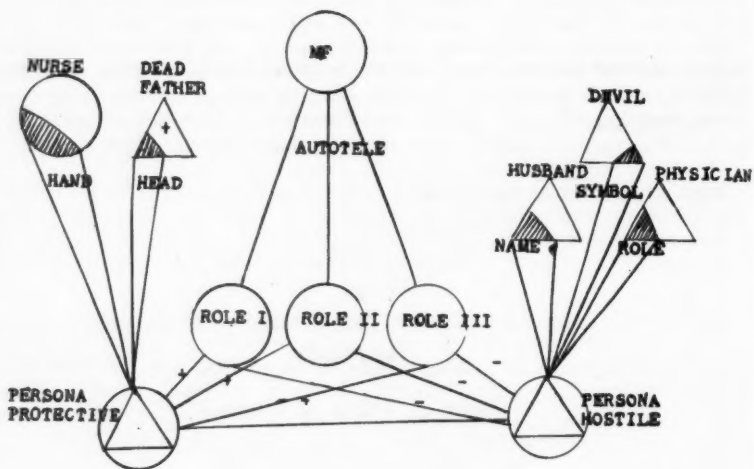
at least to all appearance, washed away. The patient does not ask for her husband, her mother, her siblings, her other relatives and friends. She does not show any interest in them when their names are mentioned. If these persons, who have been so close to her life are in her presence, she hardly notices their existence. It is as if she had lost her social atom. A new configuration has developed instead and is revealed through the psychodrama. The only figure of



Sociogram II

the old social atom which persists is the symbol of her dead father. The intensity of relation is enormously increased. The most important individual in a social atom is the patient herself. In the case here illustrated the patient's rôle in her social atom is replaced in successive phases by at least three new rôles—the rôle of the magician, the rôle of Christ and the rôle of the newborn infant. As a magician she can produce an earthquake merely by banging on the walls, or kill a man instantly by merely snapping her fingers. By breaking a cup and letting the water drop out she starts a great flood which submerges the whole world and drowns everything. In the restraint, she becomes Christ, bleeding with his wounds, and out of the general destruction she arises newborn, an infant. The sociogram indicates, furthermore, numerous relationships which the patient has in these new rôles towards half actual and half imagined beings—the "personae."

A persona, illustrated in sociogram III, is emerging when the hands of a certain nurse are the hands of this nurse, but the head is the head of the patient's father. Another persona is a physician to whom she gives the symbol of the devil, her husband's family name and the title of a doctor. Numerous other personae develop, but they are not portrayed in this sociogram. One of them is the



Sociogram III

man whom she calls by his right name but whom she sees having a peculiarly curved swollen shape. Another persona is a man, who is about six feet tall but has for her the size of a two-year-old baby. Instead of his manly voice she hears a voice which is weak and pleading. Another persona is a physician whom she sees twice his actual size and who impresses her as dark and sinister.

As she develops a new rôle and with every new rôle correspondingly new personae, she also develops towards them certain tele relations. Towards the baby-shaped man, for instance, the tele is positive; towards the oversized sinister man the tele is negative.

As we have indicated, in the normal social atom an individual has, besides the tele relationships to other persons, a tele relationship towards himself. Since, in the psychotic sociogram, the individual is replaced by numerous rôles, the relationship of the individual to himself is replaced by a relationship of every rôle to itself. The original "auto"-tele is thus broken up into several units.

Consequently, the relationship between the individual and his social atom is replaced by a relationship between his rôles and the personae.

M.F. had more than fifty sessions, each session lasting from half an hour to an hour. The sessions were sometimes one day apart, sometimes a week or more. The proper timing was carefully considered, since we tried to avoid any risk harmful to the patient. Certain symptoms continued to affect the patient's mind long after the violent period was over. The most dominant symptom was a fear of recurrence. The patient felt that it had come unexpectedly; it might come unexpectedly again. But she understood that the psychodramatic shock treatment was applied to prevent the recurrence of an attack. The patient recovered; her insight is complete. She is back in business, effective and successful. She has resumed all her old friendships and social functions. She is fully reinstated in her social atom.

CASE 2

N.W., a Canadian woman of 47, suffered from mild depressions during her pregnancy about 20 years ago. A continuous conflict with her husband and mother-in-law produced an unhappy married life. The family problem and her change of life have been contributory factors in the precipitation of her present psychosis.

When the patient arrived, her whole disease was reduced to a single symptom—the wish to die. This symptom can be interpreted as the rôle a person plays who feels dead in his social atom and who therefore is in search for means of self-destruction. N.W., in accordance with this rôle, liked to stay in bed, the bed being as close as possible to a coffin. She refused food, using starvation as the most inaggressive way of working towards the goal of death. Her position in bed was that of an ego in complete dejection and deflation. It was definitely the attitude of a body which is unable to move, of a person who is unable to act. Her bed technique, her technique of self-denying and self-destruction had one thing in common—the effort to warm up to an act. Her ego was bent toward an act of self-destruction, but that ego was at the same time determined to forbid herself any action—all in all, an impossible and desperate situation. The patient was therefore wavering between two extremes which can never meet—the desire to die immediately and the inability to do anything toward that end. Therefore the main expression reflected in her conduct was despair. The patient herself was aware of the absurdity of her situation. When a person is unable to act, unable to warm up towards a single purpose in life, prayer is a probable reaction. N.W. persistently repeated: "Please let me die." A prayer is characterized by its form of perpetual reiteration. The same words are repeated in the same rhythm

with the intensity of the whole person. The person believes that if something is said again and again, it will finally happen. The prayer is spoken in the belief that the weak ego will find an ally in another greater person, an auxiliary ego, a god.

The most outstanding symptom of N.W.'s mental disease was a general weakening of her spontaneity as it expressed itself in regard to every physical and mental function, the spontaneous ability to warm up. By spontaneity we mean here the emergence of a feeling or thought related to a momentary situation and experienced by the individual as something novel and not as a repetition of previous moments. An ordinary person, for instance, when drinking his orange juice for breakfast, has during the act, at least subjectively, the experience of uniqueness, although it is an act which he repeats every morning. For the observer there may be nothing new in the act; for the subject, however, the total experience may be spontaneous and unique. Our patient, having lost the ability to reach out in the present, finds that she has to live without living in the present moment. One momentary situation after another marches by. But she can not bind herself to the moments. The binder is missing. One person after another comes into her orbit. But she also cannot bind herself to persons. Apparently, the same binder which links her to an act links her also to a person. The process of warming up is reduced to a minimum. The reduction of the warming-up process to a minimum has numerous manifestations—loss of interest in mother and father, husband and child, sister and brother, and finally, all people and things. It may be summarily expressed as a loss of tele. At the same time the warming-up process is retarded or negated in regard to functions like eating or drinking, waking up or falling asleep, walking, sexual interest, speaking and even thinking. All momentary reality is apparently erased, the whole mind being focused on one point in the past. This process may be summarily expressed as a loss of spontaneity (spons). For the patient, at least, the loss of tele and the loss of spons are parallel.

First Phase

One of the patient's disappointments had been an inability to impress her will upon others and to be aggressive towards them. But when she tried to turn her will against herself she was equally unsuccessful. A procedure which would give her the feeling that she could make an end to her life might give her renewed self-reliance, although in a negative way. A psychodrama of death might reinforce her hold upon life. Just as her wish to die was inarticulate so also her scheme of what she might do to commit suicide was weak and inconsistent. Since her husband was a druggist she thought of drugs, some injection which would terminate her life rapidly. Although

she herself never made but a futile attempt, a shock situation was constructed which would suddenly place her before adequate means for committing suicide and before the alternative of life and death. The patient was taken into an examination room. She was instructed that immediately her wish would be gratified. After a discussion of the various drugs which could be used and their possible effect, a syringe was made ready for an injection. All was done in such a manner that the seriousness of the procedure could not be doubted. Then her arm was prepared. The patient, who up to this point had been extremely attentive and cooperative, suddenly became excited. "I am afraid to die suddenly. If I could die more slowly, just as it is with a natural disease, in a week or so." We agreed to give her the lethal drug in small doses every day. From then on the patient was taken every day to the examination room and the procedure repeated in such a way as to appear to comply with her wish.

Consequently, the patient concentrated her attention upon the psychodramatic operations which were daily performed and which would bring her slowly and painlessly to the point of death. All her dreams, phantasies, and discussions centered around the daily act. She began to eat better, thinking it might be her last meal. She began to dress and clean herself. Her appetite increased. Gradually her desire to die faded away and instead of her prayer, "how may I die?" a new prayer was on her lips: "If I could only be as I was two years ago!" Although her mind was still turned away from the present and towards a remote situation, it indicated an interest in living and not in dying.

Second Phase

The desire of the patient to return to the condition she was in two years ago can be explained. She was once a beautiful woman, much admired and proud of her looks. During the last two years, age had begun definitely to turn her hair gray, wrinkles began to appear, her teeth began to decay; admirers became rare. This analysis led us to consider a new psychodramatic situation for the patient. If she could really live through the inner situation of two years ago, such a warming up process should operate like a shock. Two years ago she was still beautiful and well, but on the brink of slipping into the psychosis. She was unable to warm up "backward" and to reactivate that situation through her own effort. She needed an auxiliary ego to stir her up to that mood. A number of situations were constructed in which an auxiliary ego acted as one of her admirers. Another situation was created in which she and her daughter introduced themselves as sisters, and another situation in which she dressed up to go with her husband to a party. The effort to warm her up was difficult. She had to be coaxed again and again. Several persons were tried as her partners until one succeeded.

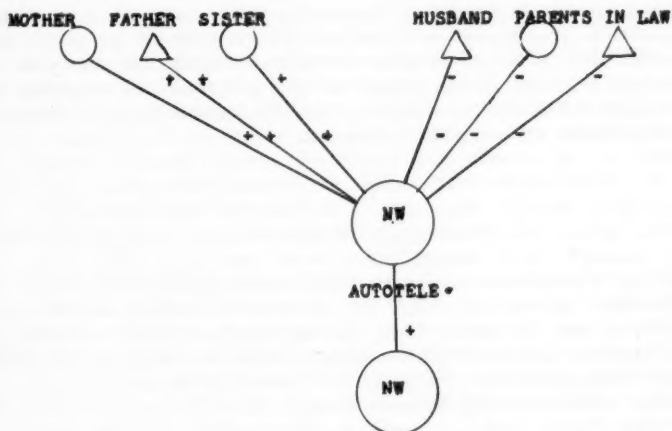
It appears fruitful to see the process of symptom formation as a gradual disintegration of momentary processes, instead of through the psychoanalytic concept of a trauma in early childhood which continues to live throughout decades in the mind of the patient and reaches into his momentary context of living. Here the warming-up backward is an active reaching out into the past. It is an active warming up towards a past moment and not, as the psychoanalyst visualizes it, the warming up of a past moment into the present.

Third Phase

After several sessions N.W.'s backward time complex began to fade out. Her reiteration of "two years ago" now alternated more often with a new prayer, "If I could be at least as I was one year ago. Then I began to neglect myself." Now she used to approach doctors, nurses and even strangers with the repetition, "What have I done to myself?" This remark seemed mysterious and puzzling. We had to find the key to it. However, all questions to explain the meaning of these words she evaded or refused to answer. One day she confessed to a nurse that during the last year she had acquired a peculiar habit in connection with her constipation. The anxiety connected with this habit caused her to delay eating in an attempt to solve her problem. Every meal became a torture to her. An analytic treatment on the interview level, however much analysis might have reached pertinent emotional complexes, would have given a symbolical and sketchy catharsis. Fortunately, N.W. had shown an excellent emotional contact with one of the nurses who became her auxiliary ego in overcoming her difficulty.

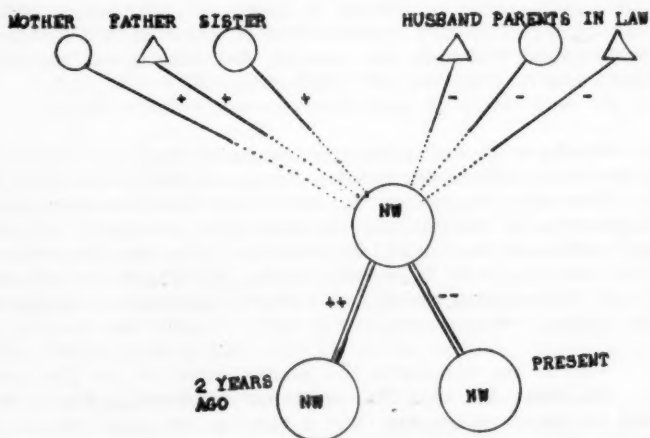
Sociograms 1 and 2 portray the configuration of the social atom of the patient N.W., before and during her psychosis. They indicate the characteristic structural changes which have taken place. Before the outbreak during her normal life her affinities are either extremely positive or negative towards the crucial persons of her social atom. This produces on the one hand a cleavage between her parents and her sister, to whom she is violently attracted, and her husband and his relatives, on the other hand, whom she violently fears and dislikes. The characteristics of her "auto"-tele are of clear-cut shape, of positive valence, of weak intensity and unbroken.

During her psychosis, the social atom pattern remains unchanged in emotional distribution and in its proportions. The cleavage persists; she loves and fears the same people as before. But the intensity of her emotions have totally changed. The hate and disgust directed towards herself dominate the picture; that is, a negative "auto"-tele absorbs most of her emotional energy. In consequence all her tele relations to other persons, although changed in quality, have become extremely weak. One can speak of a shadowing



NW
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Sociogram 1



NW
2

Sociogram 2

of the tele pattern. Her auto-tele shows a peculiar break. It is positive towards her body as it was two years ago; it is negative towards her present shape of body. Her response to the shock demonstrates that if she could have committed suicide she would have destroyed her body in its present shape, but would have preserved the shape of her former self of which she was so proud. Since this was impossible she was in a dilemma.

N.W. underwent about ten sessions, each about two to three weeks apart. Since it was difficult to warm the patient up for any action, the preparatory phase consumed three quarters of every session. Each session lasted about one hour. The effect was striking. The patient who until then rarely left her bed began to lead a more normal life. She got up in the morning, dressed herself, came into the dining room for her meals, stopped with her suicidal prayers, calmed down generally, began to read and to occupy herself with handwork. The patient is now in a process of rehabilitation. The treatment is continuing.

CASE 3

H.B., a Jewish woman of 50, is a victim of political changes in Berlin. She was leader of a large business, a widow who lived alone, a master of her own life. She had two children, a son and a daughter, living in America to whom she had become rather indifferent. When the new regime came it swept her off her feet. It took everything she had, her prestige, her money, her business, and finally she was put in jail. She emigrated to the U.S. As soon as she was safely on land, her present psychosis began.

In the two cases previously mentioned the social atom and tele structure are illustrated as they develop in the course of a psychosis. Case H.B. shows how the social atom and networks break from the normal to the pathological level, their changes in psychological organization in the critical moment, how they are uprooted within a few days and how a sensitive person, the patient, is uprooted with them. The initial phase, the early evolution of the psychosis, becomes visible.

This is the impression the patient made at the first examination: She could not sit. She could not stand still. She paced in her room in motor restlessness "like a tiger in her cage" as she described it. She grew warmer as she proceeded, perspiring from every pore, gesticulating violently and begging for something with which to end her life. When this was refused, she became violent to the point of hitting the nurse and breaking things. The attack usually lasted a few hours and was followed by a pause in which she was calmer but fearful of the next attack. Chemical means could not

prevent them or diminish their intensity. The pauses between attacks became shorter and shorter and finally she was submerged in a frenzy in which she became abusive and destructive, childish and confused. In her lucid moments she repeatedly said: "Do not ask me questions about what happened to me in the old country. The Nazis and the jail have nothing to do with my present condition. I do not care that I lost my money, my business, my independence." She became indignant when the subject was mentioned. A few weeks later, after a remarkable recovery, this point was discussed again. She began to admit "That the situation in Germany may have had something to do with my illness but I do not know in what way."

In the preliminary interviews, it was difficult to determine which of the events was more or less crucial for the development of her illness. Therefore we suggested to her that she might reconstruct on the stage all situations she could remember in sequence beginning with the moment when the fear became general. She should not leave out any situation however insignificant it might seem to her. She should describe all the persons who took part in these situations and select members of our staff to portray the different people with whom she had come into contact. Her performance on the stage was a form of psychiatric revue, short compact scenes, each lasting about two to three minutes. Some of the situations re-enacted were: A Nazi commissar takes away the keys to her store. Police make a search in her home. She calls up her son in America. She asks the American consul to help her. A state revisor controls her books and finds some irregularities. She is taken to a prison cell. She is released from prison. She leaves by train. She takes the boat to New York. For the purpose of this paper two situations are described. They give us the crucial clues.

It is the patient's apartment. The patient enters through the door. She has just given over her store. She paces up and down. She calls up her lawyer. The maid answers. "Mr. S. is" "What happened to him?" no answer. "I understand, may I speak with Mrs. S.?" The maid answers, crying "She took her life with him." "When, how, what....?" No answer. "Terrible, within three days my physician took poison, my bookkeeper took gas, my banker shot himself. One friend after another is leaving this way. What shall I do?"

The patient reconstructs a situation in prison.

It is night. She paces restlessly up and down in her cell. She talks to another inmate who is resting.

"Why don't they come? A week ago they said tomorrow. Yesterday they said tomorrow. There is no end. I was a coward. So many have done it. I should have done it too."

She perspires. Throws her arms around a prison matron.

Bangs her head against the wall. Shouts.

Sniffs.

As she shouts other inmates who try to sleep and are awakened protest: "Silence, be quiet." The patient:

"This waiting. This waiting. There is no end."

"Is nobody here who can help me? There is nobody. My son, my daughter, nobody calls. Have they all forgotten me?"

"The air is so sticky. It smells here."

"I can not help myself."

ANALYSIS

The patient warms up easily. She acts so rapidly; her ideas prompt her so quickly that her partner finds it difficult to follow. At the end she is exhausted and cries. The crucial problem of the patient is the rôle of death in her social atom and its relationship to her personal death. Death becomes a more frequent guest in the social atom of an older person. It calls away more and more of the intimate members of his social atom—parents, a brother, a close friend, etc. As life unfolds, the arrival of death has an accelerated but natural rhythm. The effect upon a person concerned is a cumulative shock. A man dies a bit with every death within his social atom before he dies himself.

The psychological organization of the social atom is a determining factor in producing this effect. Its structure is more rigid in older persons. If a loss of important members occurs in advanced age, replacements are hard to make. Gradually the social atom shrinks. The situation up to this point is normal but something extraordinary has taken place in the life of our patient. Due to a regime of violence in the community in which she lives death moves in such a swift pace into her social atom that it crumbles before her own eyes. It may be soon exterminated. Its extermination is something near death. Death of the social atom resembles organic death. It is hard to start a new social atom at old age. The patient has become estranged from such members of her social atom to which a woman and mother clings when she becomes old. After her husband's death she had decided to lead her own life and to end it a lone wolf. It is hard to turn the clock back. Her situation is colored by the fact that it is not natural death from which her friends die. It is voluntary, self-made death—suicide. Suicide has become a

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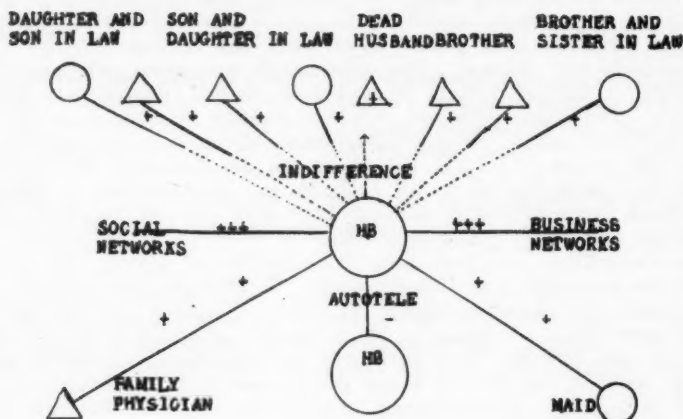
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normal reaction, a standard, the proper thing to do. It has become abnormal to go on living when the intimate associates of one's social atom have one common answer to life—suicide. She paces up and down on the stage in a gesture of despair. All her friends were able to make this decision. She cannot. In the prison cell the sudden break of her social atom is symbolized by her imprisonment and isolation. The social atom has been her identity, the carrier of her honor and self-respect, of her achievement, of her loves and hates. She cannot return to it. In the prison cell she is thrown at her naked self. But the self is not fully alone. That nucleus of feelings which every individual develops from early infancy on in regard to himself and which produces a mirroring reflection of her position in the community, was with her. This shadow of herself, the product of the auto-tele, has definite shape. It changes as a person grows older and probably reaches its climax of clarity and intensity in the years after adolescence. Its intensity diminishes with the advance of age, but may gain in clarity and precision. Its shape may become confused and blurred if the social atom becomes disorganized and is in distress. The strongest image which recurred was the image of her dead body. That meant final rest. To be the executioner of her own death appealed to her as much as to have been the director of her own life. The frequency of associations which brought her nearer to the act of suicide was immensely increased. With every pace in her cell she demonstrated that she could do it. With every protest and shouting she rebelled against a life which was lost.

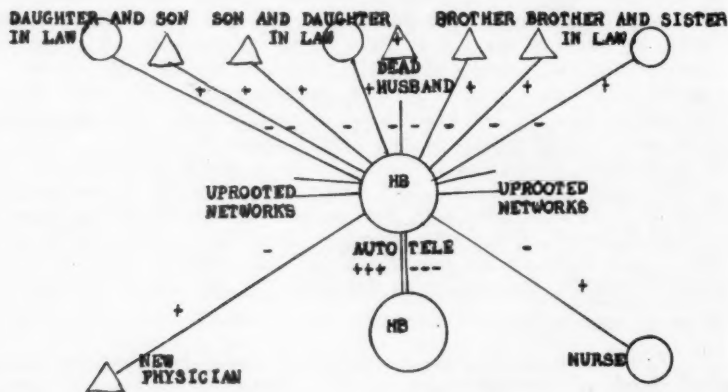
When she arrived in the United States, her fear that she could not start anew as a business woman, mother, or mother-in-law, became rapidly justified. She hated and she was hated. She wished she could go back to the jail to fight it out to the end. Through the performance of insanity she could return to herself and become the center of events. The frustrated psychodrama in jail, and frustrated suicide plan at her home could be worked out. Her psychosis was an exaggerated replica of her psychodrama of suicide. She tried to swallow drugs and buttons and as a result projected pain into every part of her body. She feels that every one in the hospital wants to do her harm and, just as she wanted to escape from the Nazis in death, she wants to escape from us by doing harm to herself. The desire to get out of jail and the waiting from day to day had a perfect counterpart in her desire to get out of the hospital.

Sociogram I indicates a cleavage between her relatives in distant countries towards whom she has become indifferent and herself, her business, and her business associates who form a positive nucleus of emotions around her—the boss. She has a large number of acquaintances among whom she has the prestige of being a remarkable business woman. The only persons to whom she is strongly attached are her family physician and her maid.

HB
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Sociogram I

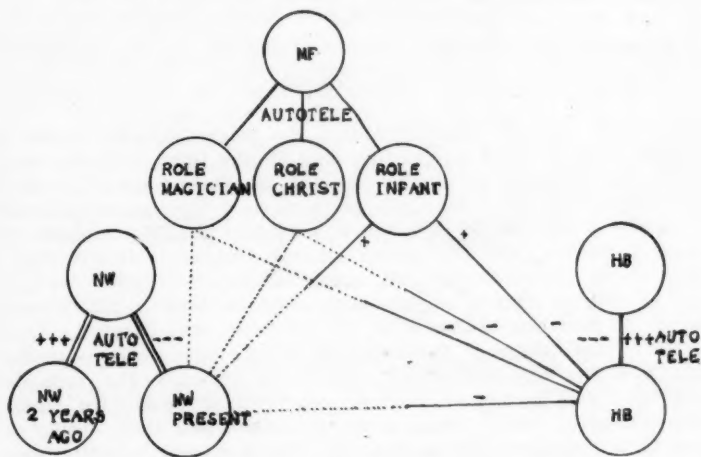
Sociogram II portrays her social atom during her stay in the hospital. It indicates that her auto-tele has increased in intensity. The indifference towards her relatives who brought her over to

HB
2

Sociogram II

M.Z. had only a few sessions. But they were more helpful for the understanding and reconstruction of the case than the daily interview and observation during a period of four months. The patient is fully recovered. She returned to her children and started a new life.

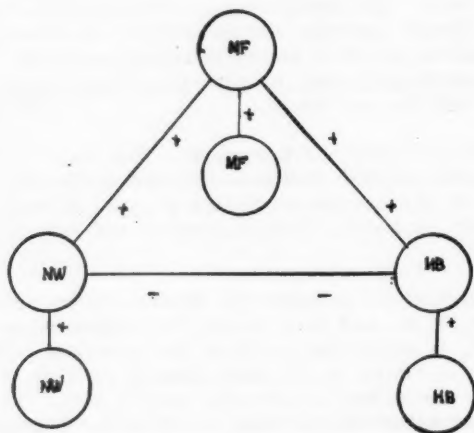
Sociogram III portrays the relationship between the three patients M.F., N.W. and H.B. during the active phases of their psychoses. M.F. is supplanted by three new identities. In the rôles of magician and Christ no tele was directed towards H.B. or N.W. In the rôle of the infant positive tele goes to both. In this rôle H.B. appears to her as an important personality, the owner of the hospital and N.W. appears to her as a beautiful distinguished lady. H.B.



Sociogram III

has a negative tele towards M.F. in all her three rôles and towards N.W. in that rôle in which she is visible.

Sociogram IV indicates the situation after the treatment. A positive relationship developed rapidly between M.F. and N.W. and between M.F. and H.B. but a mutually negative tele between N.W. and H.B.



Sociogram IV

SUMMARY

The chief difference between the psychodramatic shocks in the three cases is that in the first and in the third, however surprising and upsetting the procedure may be, the patients are at all times fully aware that they are partners in a therapeutic procedure. The shocks in the second case are applied in true life situations and in such a fashion that the patient has all reasons to believe that the effects of the procedure are real. Only when the patients were induced to assume rôles of a past time, then at least a partial awareness of the fictitious character of the situation was present. It appears that the degree of the cathartic effect produced by a shock depends upon the degree of active spontaneity to which the patient can warm up. The process of warming up produces during the shock a higher frequency and a wider range of associations than during the course of the disease. It enables the patient to put himself into action and activate bodily and mentally his crucial conflicts so that he feels more clearly all the possibilities of a solution and eventually will turn his will towards a new path, away from his impotent and perverse efforts.

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NEW FRAMES OF REFERENCE

The social atom appears as a fundamental pattern which reflects the essential situation of the individual in society. Each individual has his own pattern of social atom which like his handwriting can be distinguished from that of other individuals and which maintains its individuality. The social atom patterns of normal persons of different ages have been studied and found to portray typical variation with development of age. Thus a frame of reference is given with which we can compare the changes within the social atom of individuals afflicted with mental disorders. A person with an abnormal social atom development may go through life without clinical manifestation of a mental disturbance but these can be rapidly activated as soon as a precipitating cause appears. The precipitating cause may be at one time a physical condition, for instance, arteriosclerosis of the brain; at other times, a psychological condition, for instance, a feeling of inferiority; at other times, a social condition, for instance, death of a parent; at other times, an economic condition, for instance, loss of a job.

The three patients, M.F., N.W., and H.B., appeared sociometrically abnormal long before they appeared clinically abnormal. The actual life within a social atom however is far more complex and richer in texture than sociometric tests alone are able to reveal. A procedure had to be devised to bring into the view of the investigator the social atom in its living reality and the persons participating in their visible and invisible rôles. The psychodrama comes closer to giving a totalistic picture of human relations than any other form of expression, better than handwriting, dreams or free association. In the arts the drama has been considered superior to all forms of expression because it contains them all and is a synthesis of them all. Just as it embraces the lyric and the epic element and brings them to a new synthesis, the psychodrama embraces the mind and body of many individuals united in action and brings them also to a new synthesis. Thus it portrays the dynamics of a miniature society and provides an experimental situation for the study of the simplest and most complex patterns of interpersonal relations.

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PERSONALITY DEVELOPMENT IN RADICALS¹

A Comparative Study

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SYNOPSIS

The material for this study was obtained through an autobiographical schedule containing 213 statements ranked for statistical analysis. The statements covered most of the important behavior patterns which constitute the process of personality development. There were three kinds of data: Those pointing to absolute or near-absolute similarities between radicals and non-radicals; those disclosing certain advantages in the development of radicals, as for example the fact that radicals tend to be more realistic or less introverted (and so less subject to fainting, dizziness, convulsions, etc.); and finally, certain data showing the existence of trends in the development of radical personalities which, on the basis of what we know of child development, can not be considered favorable (tendency to pessimism, inferiority attitudes, etc.). Most of these have to do with parent-child conflicts. It is emphasized, however, that this is not an evaluation of radical theory, but an effort to establish the factors which sensitize certain individuals to, and prevent others from accepting, radical ideologies.

PREVIOUS STUDIES

The most valuable studies of radicalism and conservatism, in the last fifteen years, have come from the pens of Wolfe (12),

1. Read in part at the forty-fifth annual meeting of the American Psychological Association, at Minneapolis, Minn., Sept. 1, 1937. Acknowledgment is made to the National Research Council for an enabling grant; the N.Y.A. offices of the Herzl junior college and the University of Akron for help rendered by students at various stages of this study; and to Dr. George Perkins and Mr. Bernard Landau for assistance with the schedules and interviews.

Moore (5), Root (7), Reed (6), Howells (2), Sinclair (9), Lasswell (4), Vetter (11), Ruch (8), and Diamond (1). Wolfe (1922) attempted to show that radicals and conservatives manifest attitudes for and against a large variety of specifically different situations. Root (1925) argued against the implication that radicals are consistently irrational, emotional, and malicious, and distinguished between radicalism which he called constitutionally induced, and that which he considered socially induced. Moore (1925) pioneered with an experimental study in which he reported no difference in emotional stability, intelligence, or learning ability of radicals and conservatives, but found reliable differences in speed of reaction, ease of breaking habits, readiness in making quick decisions, and independence in the face of majority influence. Reed (1927), in a questionnaire study, found a definite lack of consistency in the responses of both radicals and conservatives, and assumed that, if measurement included more test-fields, the degree of consistency would be even less. Howells (1928) Sinclair (1928) discovered, in experimental studies of religious conservatives and radicals, differences in intelligence, scholastic achievement, and test performance (discrimination, speed, muscle coordination, suggestibility, maze running, and moral judgment), but the differences were not consistent, the radicals being superior in some respects and the conservatives in others.

Lasswell (1930) contributed the first clinico-methodological study of radicals and conservatives, in which he showed that the understanding of radical behavior and leadership demands insight into motives that lie beneath the conventional verbal level and require a protracted method of analysis. Vetter (1930) tried to draw a line between typical and atypical political behavior on the basis of a verbal judgment test, but did not allow for certain pitfalls found in this type of diagnostic procedure. Ruch (1934), in a study of age in relation to human ability, established that conservatism is biologically the heritage of senescent man; but he did not attempt to account for conservatism in the young. Diamond (1936), using a paper-test technique with a group of college students and active revolutionists, found the personalities of radicals more subject to change, though their scores showed a bimodal distribution. He also discovered that radicals tend to be introverted in the early stages, and extroverted in the later stages, of radicalization.

STANDARDS, SUBJECTS, AND TECHNIQUES

A survey of the literature reveals that some studies have had it as their purpose to delimit the field in the light of one or another hypothesis. Some studies attempted to develop diagnostic signs whereby radicals might be selected from the general population. Several studies aimed to establish the abilities or disabilities of radical personalities. There were studies whose primary aim was frankly

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methodological. Finally, a group of studies concerned themselves with the correlation of two unknown variables, one of which was radicalism and the other some trait of personality which happened to be popular at the time. The definition of radicalism, the question of whether one or another testing procedure would yield the most reliable results, and the differential classification of radicals and non-radicals seem to have been the most difficult problems of the investigators in the past fifteen years.

This study differs from previous studies of radicals in several respects. The need for differential diagnosis has been eliminated by the selection of experimental subjects who were members of organized radical groups. The problem of abilities has been replaced with the problem of behavior-patterns. Instead of standardized test-forms we have used a descriptive schedule calling for objective responses. Believing that the lines of genesis for males and females are largely different, we have not treated the radical group *en masse*, but divided it into sex-groups and matched these against similar control-groups of declared non-radical propensities. In the main, however, this investigation is a search for the answers to two questions not previously raised in any other study, *viz.*, Are there specific factors which have a determining influence on the development of radical personalities? If so, can they be isolated and distinguished quantitatively from similar trends in non-radical types of personality?

The material for this study was obtained through an *autobiographical schedule* containing 213 statements ranked for statistical analysis on a three-to seven-point scale.² The statements covered most of the important behavior-patterns which, sequentially considered, constitute the process of development. Variations in the key concepts helped to refine the measures obtained and to enrich the content of the study. A few representative statements, showing the general structure of the schedule, are given below.

4. Were you breast fed
 - a. by your mother
 - b. by a nurse
 - c. by someone else
25. Do you remember your bowel movements as a child to have been
 - a. pleasant
 - b. unpleasant
 - c. a matter of indifference
33. Your attitude toward washing your body might be called
 - a. favorable
 - b. unfavorable
 - c. indifferent

2. The items of the schedule were selected from the 784 items listed in the outline for the study of personality prepared by Krout (3, pp. 278-309).

50. Did you sleep in your parents' bedroom
 - a. frequently b. infrequently c. not at all
77. Conflicts between your parents were
 - a. frequent b. infrequent c. non-existent
98. Would you say that you were nagged
 - a. frequently b. infrequently c. not at all
103. When your father proved especially successful did you feel
 - a. elated b. pleased c. depressed d. indifferent
122. Do you have difficulty in expressing your affection for the person whose affection you are seeking
 - a. frequently b. infrequently c. not at all
213. Do you regard life, in general, as
 - a. an opportunity for happiness and enjoyment
 - b. a chance to help some deserving people to make their life happier and fuller
 - c. a waste of time, i.e., "much ado about nothing"
 - d. a continuous growth tending toward a finer and greater future
 - e. a chance to "straighten accounts" with some worthless characters or groups
 - f. a chance to reveal one's true worth and ability
 - g. something which eventually leads to death anyway.

The schedules were filled anonymously by 153 individuals. Forty-four of these, members of the Young People's Socialist league, and twelve, members of the Young Communist league, made up the experimental group.³ This group, including 37 males and 19 females, was matched against a group of 97 controls, including 72 males and 25 females. In stating their politics, the controls qualified as non-radicals. If, however, some radicals were part of the control group, the results have probably gained in reliability as a result.

The age range for both groups was 18-25, but the radical men were older by 1.4 years. The modal educational achievement of both groups was the equivalent of high school training. Economically both groups derived from the lower-middle class and the skilled labor group. Religiously the groups contained the same percentage of Jews and Christians. Approximately the same percentage of foreign-born was found in the two groups.

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3. Because of the fact that 77% of the subjects were of the socialist group, it is probably correct to say that our results refer almost entirely to socialists rather than to communists.

Securing schedules from the experimental subjects proved to be a difficult task. The controls, being college students, did not present a similar problem. Only the cooperation of the radical leaders, and the fact that the solicitors (assistants) were themselves outstanding members of the radical groups, made it possible for us to obtain 56 schedules.⁴ The comparison of the groups was not mentioned to any of the subjects. It might have served as a negative incentive. Interviews, preceding and following the filling of the forms, emphasized the need for personality studies based especially on developmental factors.

No total scores were sought through this schedule. The multiple-choice answers, and their variations, supplied by the subjects, were studied in terms of per cent-differences between each of the sex-groups of the radicals and the controls. Per cent-differences calculated for combined sex-groups, intended as an additional test of reliability, were discarded as more confusing than revealing. Sigmas of the differences were computed, following the formula:

$$SD \quad \%D = \sqrt{\frac{p_1q_1}{n_1} + \frac{p_2q_2}{n_2}}$$

in which $p = \% \text{ yes}$; $q = \% \text{ no}$; $n = \text{number of cases}$; $1 = \text{radicals}$; and $2 = \text{controls}$. Critical ratios, expressing the relation between the mean per cent-differences and their sigmas were obtained for items compared. Only per cent-differences of 10 or over were used.

We have assumed that, to be reliable, a given difference would have to show a critical ratio of 2.00, as only then would the difference approach a significant probability figure. Departures from this assumption are to be found in cases (a) where other data of a closely similar nature, having a standard critical ratio, verified the significance of the difference in question; and (b) where coordinate differential trends were discovered for opposite sex groups, and it was possible to generalize in regard to both sexes in spite of the fact that the critical ratio for one of them did not appear substantial. In no case, however, will reference be made to a datum in which the critical ratio was less than 1.00.

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4. This point should meet the objection that differences between radicals and non-radicals were due to the non-conventionality and greater cooperativeness of radicals. It is true that radicals are less inhibited than non-radicals; but the objective test of this possibility, for our purposes, was their willingness to conform with the requests of our assistants.

SIMILARITIES BETWEEN SUBJECTS AND CONTROLS

Of the data obtained only two kinds appear to be significant: those that show virtually no differences between the radicals and their controls and those which show reliable differences as judged by the criteria adopted. Listing, first, data showing no differences between the male and female radical groups and their respective controls, we find a number of interesting facts. On the side of basic impulses we find no reliable differences in such oral patterns as breast-feeding, finickiness in regard to food, and care in verbal expression. In the field of anal-evacuative activity we find similar trends in the frequency of elimination habits and the incidence of vomiting. In the genito-urinary field we find the recurrence of enuresis to show no reliable differences as between the radicals and the controls. No consistent variations have been found as regards sleeping habits, sleeping in the parents' bedroom, the time required to fall asleep, and the disturbance of sleep in childhood.⁵ In the reports of relations between subjects and parents no reliable differences were found in the emotional stability of parents, the openness or secrecy of parental conflicts, and present trends in preference of subjects for the companionship of married or single men and women. As for adjustment-mechanisms employed, no differences were discovered in such conversion patterns as functional paralysis or such introversion-phenomena as disorientation in new surroundings. Interest in music showed no differences.

DIFFERENCES IN BASIC PATTERNS

It is noteworthy that there are many socio-environmental similarities, and a great many similarities in basic habits and adjustment-patterns, of radicals and non-radicals. Depending only on measures indicating a fair degree of reliability, we find differences in the conditioning of certain basic impulses, in parent-child responses, in the patterns of adjustment, and in the self-regarding attitudes.

We shall begin with differences indicating superior trends among the radicals. Reported resentment of the shift from breast- to bottle-feeding is smaller in both male and female radicals than it is in their controls (MD 14%, CR 2.29; FD 17%, CR 1.55).⁶ Speech difficulty, showing no difference among the males, appears to be

5. With the exception that the radicals slept with children of the same sex to a somewhat later age (MD 1.9 yrs., CR 1.51, FD 2.3 yrs, CR 2.42). MD refers to male difference; FD refers to female difference; and CR indicates critical ratio, or % diff./sigma.
6. Subjects had an opportunity to consult their parents, if they so wished, in answering these questions.

more dominant among the female controls (FD 20%, CR 2.50). Furthermore, female radicals are relatively less inclined toward thumb-sucking than are their controls (FD 20%, CR 1.33); though the difference for the males is not equally reliable. Nail-biting also is relatively more prevalent among the controls than among the radicals (MD 18%, CR 2.00; FD 13%, CR 1.19). Substitutive behavior, such as finger-sucking and nail-biting, points not merely to the prolongation of infancy, but suggests the tendency toward unresolved, persistent emotional tensions. If these differences are consistent, we should find a greater incidence of other introversive trends among the controls.

Indeed, several forms of introversion seem to predominate among the non-radical subjects, especially the females. There are relatively less frequent auditory hallucinations among the radicals than in their respective controls (MD 16%, CR 1.77; FD 19%, CR 1.36). There is a relatively greater tendency among the female non-radicals to walk in their sleep (FD 15%, CR 1.67), to grind their teeth while asleep (FD 15%, CR 1.66), to manifest dizziness (FD 23%, CR 1.53) or convulsions (FD 13%, CR 1.19), and to experience disgust at the sight of blood (FD 35%, CR 2.50), thus confirming the inference derived from other sources.

Of the so-called conversion trends we find digestive disorders relatively more frequent among male controls (MD 17%, CR 1.70), and the tendency to diarrhea, specifically, more common among female non-radicals (FD 23%, CR 1.64). We also note that radicals record greater suspicion of "society's rulers" (MD 21%, CR 2.10; FD 15%, CR 1.50), as must be expected; but, interestingly enough, it is the non-radicals that appear to be more suspicious of their relatives (MD 18%, CR 1.80; FD 24%, CR 1.60). Finally, male radicals report scholastic superiority in such subjects as biology (MD 25%, CR 2.50) and literature (MD 20%, CR 2.22), and female radicals report superiority in the social sciences generally (FD 17%, CR 1.21).

The data just presented raise several questions. Referring primarily to females, they cannot be said to be as reliable as are our other data, because the number of female cases was relatively small and, also, because sixteen of the twenty-four differences cited had critical ratios of but 1.19 to 1.80. If these differences were to be taken as conclusive, we might explain them, in terms of Diamond's study (1), on the grounds that radicalization is correlated with a trend away from introversion. In other words, a fundamental interest in social situations (cf. achievement in social science and literature), tends to reduce the incidence of the more serious introversions (hallucinations, dizziness, fainting, convulsions) by externalizing repressed impulses of radicals.

Among factors which do not favor radicals we find a relatively small number of differences in anal-evacuative behavior. The female radicals report less severe or more irregular bowel-training (FD 45%, CR 1.66), though no similar differences were obtained for the males. It may be significant that less pleasant recollections of face-washing are found in the female radicals (FD 36%, CR 2.77), and that both male and female radicals show a less favorable attitude toward body-washing (MD 28%, CR 3.20; FD 13%, CR 1.19). Since radicals do not incline toward digestive disorders (excepting, perhaps, the tendency of female radicals to constipation (FD 26%, CR 1.83), it may be assumed that negative anal trends, connected with personal hygiene, are due to inconsistency or indifference in the mothers of radicals.⁷

On the oral side, however, various outstanding differences are discovered. We have already noted the lesser resentment of radicals to the shift from breast to bottle and the lesser tendency of radicals to resort to substitutive relief from oral tensions. Oral deprivation, in the case of radicals, is most effective. The female radicals claim insufficient milk-bottle feeding (FD 16%, CR 2.00). Coincidentally they show a greater frequency of the tendency to bite things or people (FD 15%, CR 1.66), though the difference for the males has an 'unreliable CR. The lesser interest in food on the part of both male and female radicals (FD 22%, CR 1.57; MD 44%, CR 4.88), extending, in somewhat less reliable fashion, to the strength of the food appetite and the preparation of food; and the excessive frequency of smoking among radicals (FD 21%, CR 1.40; MD 28%, CR 2.80), lend weight to the assumption that radicals tend to be so conditioned on the oral level (orally fixated) that they regress to this level in later years. What effect sudden and early weaning may have had on the development of later attitudes is impossible to explain, however, without pertinent data on the family milieu.

DIFFERENCES IN PARENT-CHILD RELATIONS

There is a prevalent tendency among male radicals to report their mothers as strict (MD 19%, CR 2.11), indifferent (MD 11%, CR 2.20) or inconsistent (MD 11%, CR 1.57). A complete picture of mother-son relations is obtained from data indicating that the male radicals are less favored by their mothers (MD 25%, CR 2.78), are more nagged by their mothers (MD 27%, CR 2.70), have only moderately personal relations with their mothers (MD 20%, CR 2.22), tend to express less satisfaction over their mothers' successes

7. These differences may also be artifacts produced by a development, after becoming radicalized, of snobbishness toward such "bourgeois" virtues, and consequently, a response of "indifferent" when the question is put.

(MD 16%, CR 2.00), and finally experience less depression (MD 13%, CR 1.44) but greater anxiety (MD 25%, CR 2.00) than their controls when their mothers fall ill.

As a direct corollary of this picture of mother-son relations we might take the facts dealing with the love-life of these subjects. It is interesting to note that radicals express greater preference than their male controls for women of "equal status" (MD 27%, CR 3.00) rather than for women who might claim superior status or who might seem inferior. Though they claim less difficulty in expressing their affection for women (MD 27%, CR 3.00), it is of especial interest that—possibly by way of compensation—male radicals report a greater number of love affairs (MD 2 aff's; CR 2.01), greater difficulty in associating with women than with men (MD 12%, CR 1.50), and greater frequency of frustration in love affairs (MD 17%, CR 2.43). Thus do we find, in the persistent search of male radicals for a mother-substitute, and their unsuccessful attempts at object attachment, a logical sequel of mother-son relations.

The data on father-son relations offer little contrast to the foregoing. There is less probability of the radical sons having merely indifferent fathers (MD 16%, CR 3.20), i.e., fathers not actively concerned with their children's conduct. Indeed, there is greater probability of the sons having strict fathers (MD 15%, CR 1.50). There is no paternal care showered on male radicals (MD 29%, CR 2.90), since the fathers express relatively greater preference for a child of the opposite sex—in other words, reject the subjects (MD 23%, CR 2.87). It is perhaps to be expected that radical sons should manifest less satisfaction over their fathers' successes (MD 26%, CR 2.89). It is however interesting that the sons experience relatively less depression (MD 26%, CR 2.89) but more frequent anxiety (MD 20%, CR 2.22) when their fathers fall ill. As in the case of mother-son relations, illness lifts repressed hostility, and anxiety is the result.

Rationalizing an assumed impossibility of identifying with their fathers, male radicals claim greater physical resemblance to both parents (MD 12%, CR 1.50) and less character resemblance to either parent (MD 12%, CR 1.50). They go further in reporting markedly less conscious desire to be like the fathers (MD 32%, CR 3.55). Obviously male radicals are but incompletely identified with their fathers, and their conscious avoidance of father-identification is but a sign of their conviction that they had been rejected.

The evidence on daughter-mother relations agrees with the above in showing that female radicals are relatively less favored by their mothers (FD 33%, CR 2.36), have nagging mothers (FD 22%, CR 1.33), and are less confidential with their mothers (FD 20%, CR 1.33). It is within the range of expectancy, therefore, that

there should be a greater incidence of claims of physical resemblance to the father in female subjects (FD 22%, CR 1.46), and claims of character resemblance to both parents (FD 15%, CR 1.00). If a semblance of normal mother-identification can be found in the greater tendency of female radicals to express satisfaction over their mothers' successes (FD 27%, CR 2.43), there is nevertheless proof of incomplete identification in their more frequent claim that they do not desire to be like their mothers (FD 30%, CR 2.00). There is also evidence of regression to early conflicts in their tendency to excel female controls in competing with other girls for their boys (FD 20%, CR 1.66), and in a greater incidence of frustrated love affairs (FD 16%, CR 1.78). We must thus conclude that a complete mother-identification does not take place in female radicals. The father-daughter situation tends to strengthen this conclusion.

The attitudes of female radicals to their fathers are hardly more satisfactory than those toward their mothers. There is a reported lesser tendency to have an indifferent father here, as in the case of the males (FD 15%, CR 1.27). Judging from the fact that fathers of female radicals tend to be relatively more concerned with the disciplining of their daughters (FD 20%, CR 1.50), this could hardly be expected to be otherwise. Other evidence points in the same direction. Female radicals are relatively less favored by their fathers than are the controls (FD 25%, CR 1.92), and there is greater frequency of paternal preference for a child of the opposite sex, (FD 13%, CR 1.18), suggesting attitudes of rejection and jealousy. Probably as a result of this rejection we find an appreciably larger trend toward foster-parent day-dreams among our female radicals (FD 19%, CR 1.73). Their claim that there is relatively less intimacy between their fathers and themselves is further confirmation of this trend (FD 16%, CR 1.23). Guided by the evidence presented, and the fact that female radicals experience relatively greater difficulty in expressing their affection for the men they love (FD 28%, CR 2.00), we may conclude that the father-daughter relationship, like the mother-son relationship, among radicals, is not satisfactory.

Among the factors in the family milieu which are conducive to the development of personality none perhaps is more important than the mode of punishment employed. The findings in our study are conclusive on this score. Both in male and in female radicals we have found a greater probability of punishment through nagging, ridicule, or reproach (MD 34%, CR 3.78; FD 41%, CR 3.42), instead of through corporal punishment, a mode of control which predominates in non-radicals to the same extent that the other is found among radicals. The effectiveness of such verbal and social restraints in conditioning inferiorities, fears, and powerful repressions is well known, and is amply demonstrated in our subjects. If we add these to anxieties created in parent-child relations, suppressed

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aggressions growing out of rejection and discrimination, and attitudes of insecurity created by the constant frustration of effort, we find ample basis for tensions which attain an outlet in radical activities.

DIFFERENCES OF ATTITUDE AND OVERT ADJUSTMENT

The fact that the more serious introversive trends are more frequent among the controls does not mean that radicals are, or have been, devoid of introvert responses. Male radicals are relatively more inclined to lose large quantities of objects than are the controls (MD 12%, CR 3.07). It is of interest to the symbolist that male and female radicals tend to lose, more than do the controls, such objects as books (MD 19%, CR 2.37; FD 22%, CR 1.46) and pens (MD 16%, CR 1.60; FD 35%, CR 3.18). Also, female radicals show a dominant tendency to lose track of dates and time (FD 24%, CR 1.60), and male radicals show a relatively marked tendency to forget names (MD 62%, CR 7.78).

Of equal interest are the compulsive trends of the subjects. The compulsion to "set fire to something" predominates in both male and female radicals (MD 14%, CR 1.75; FD 18%, CR 1.64). Among female radicals we find the compulsion to "light matches for their own sake" as another form of the pyromanic trend (FD 17%, CR 1.70); and also a greater tendency to appropriate articles not belonging to them, whether consciously or otherwise (FD 35%, CR 2.60). Among male radicals a comparatively greater tendency to talk in their sleep is also worth mentioning (MD 24%, CR 2.40) because of its reliability. All these findings indicate trends in substitute expression of inhibited impulses. They are manifestations which call attention to the difficulties obtaining in the home of radicals.

One of the important discoveries of this investigation is the fact that male radicals (but not the females) have fewer intimate friends than their controls (MD 21%, CR 2.63). Perhaps the reason for this lies in their relatively greater tendency to attach themselves to individuals who are either older or younger (MD 33%, CR 3.67) but not of similar age. The lack of associates of similar age presupposes a faulty family structure which confines the children to the company of parents and siblings.

The question of whether radicals take an aggressive or a passive attitude toward the physical world is of especial importance because of the repressed aggressions to which our data have testified. One way to check on this attitude is to inquire into the play habits and school achievement of the subjects. Here we find rather striking differences. Male radicals are relatively uninterested in social games (MD 21%, CR 3.00), a fact which may be explained in terms of the lesser sociability of our subjects. Male radicals are also less

interested than are the controls in athletic pursuits (MD 64%, CR 8.00), and have a relatively lesser liking for sport objects (MD 41%, CR 5.86). Consistently enough, they appear to be most envious of those who are intellectually or scientifically (sic) successful, rather than those who are athletically, politically, or socially successful (MD 31%, CR 3.44).

The total impression obtained from the study of the inferiorities of radical females is similar to that gleaned from the study of the males. Like the male radicals, the females show a relatively greater antipathy to sport objects (FD 35%, CR 3.18) and a markedly larger deficiency in the physical sciences (FD 50%, CR 3.84) than do their controls. They show a lesser tendency to do superior work in biology (FD 21%, CR 1.75).

Finally, we might consider differences in self-regarding attitudes of radicals and non-radicals. Male radicals, we find here, have a greater tendency than their controls to express certain felt limitations (MD 37%, CR 2.46). They show a relatively greater tendency to attribute these to physique (MD 17%, CR 2.10), inferiority to their competitors in games (MD 21%, CR 2.33), and economic position (MD 21%, CR 2.10), at least the first two of which seem to have their roots in father-son conflicts. The women, on the other hand, tend to rationalize their inferiorities on the grounds of intellectual, rather than any other kind of, deficiency (FD 31%, CR 2.21), holding that mentality (FD 16%, CR 1.78), training (FD 16%, CR 1.23), and economic position (FD 17%, CR 1.22) are responsible for their failures, in respective order.

In view of these attitudes it is perhaps not surprising that, of several definitions of the concept life, radicals tended to reject that of "opportunity for happiness and enjoyment" (MD 10%, CR 1.80; FD 22%, CR 1.47). Male radicals also showed a relatively larger tendency to reject the definition of life as an "opportunity to reveal one's true worth and ability" (MD 24%, CR 4.00). In keeping with this general trend was the finding that there is greater probability of the radicals' (male or female) taking a frankly pessimistic attitude toward the business of living (MD 20%, CR 2.22; FD 27%, CR 1.93). Most surprising, however, especially in view of its high reliability, is the fact that a vast majority of male and female radicals had at one time or another entertained suicidal thoughts (MD 36%, CR 4.00; FD 39%, CR 2.79). This might be incomprehensible, were it not for the fact that psychopathology has prepared us to regard suicidal tendencies as inverted death-wishes for other individuals, presumably parents or siblings.⁸ Thus defined, the

8. We have found a highly significant difference for male radicals in the birth-order of brothers with whom they tended to come into conflict and the birth-order of brothers whom they had a tendency

self-regarding attitudes, not excluding the tendency to suicide, become part of a long chain of developmental trends which the autobiographical schedule has disclosed.

DISCUSSION

The difficulty and danger of relying on consciously available facts in studying personality development need not be stressed. The limitations of memory and the tendency for early memories to be transformed by later attitudes must be recognized. Stagner (10) offers evidence of the fact that an individual showing excessive emotionality in adolescence had had an excessively emotional childhood, but qualifies it by saying "at least he feels that he had." The same caution must be observed in this case. Our conclusions must be guarded by the fact that the subjects' deeper memories were not tapped by thorough analysis. The possibility of retrospective falsification cannot be overlooked.

Despite this reservation, we think some tentative suggestions regarding our findings can be made. There is a certain consistency about the results from markedly diversified questions, which argues for a deep-lying cause.

All of these results are harmonious with our major finding, which is that radical individuals tend to claim rejection by their parents. Given this attitude of rejection, we should not even have to consider the question of severity of punishment as a factor. However, the type of punishment reported by the radical groups (nagging, ridicule, and reproach) is undoubtedly one which contributes to attitudes of inferiority and guilt.

The social inadequacies of the radicals can readily be linked with this attitude of rejection. The inability to function adequately with persons of similar age indicates an attitude of inadequacy and insecurity which must stem from the parent-child relationship. The confused love-lives of the radicals bear this out further. Statistically speaking, these are more likely to be an effect of pre-existing social maladjustment than a cause of subsequent maladjustment.

There is one phase of psychoanalytic theory which this finding seems definitely to support. It is frequently asserted that the individual's reactions to social restraint mirror his reactions to his parents. In this case the felt rejection and consequent tendency toward

(Footnote continued) to like; but the figures depend on the assumption of equal-sized families for the two groups, and are not specific as to the exact ordinal positions of brothers involved. The data are therefore omitted (cf. 4).

antagonism (even if repressed) must be interpreted as leading toward an attitude of "suspicion toward society's rulers" and affiliation with radical organizations. We do not need to question whether the subjects were "suspicious of society" before joining the radical group. The point is that they were specifically sensitized to influences of that type.

The general pessimism and questioning of the basic values of life must also be assumed to develop out of an unfortunate parent-child constellation. The *Weltanschauung* of the child is but a view of his little world colored by his emotional experiences. If these are predominantly unpleasant (as many of our data show), we must expect his view to be unpleasant. Again, inferiorities and compensatory egotism show an obvious relationship to the type of punishment employed by the parents, and the child's need for self-importance, which was supplied in control families by direct identification with the parents.

In this respect it is instructive to compare our data with those presented by Stagner (10, pp. 147 and 315), in which predominantly unpleasant experiences reported from childhood were shown to be correlated with distinctly maladjusted emotional responses on the adolescent level. That group of subjects showed no radical tendencies. We might suggest that such unpleasant experiences may eventuate either in personal disorganization or in radical thinking.

With regard to the validity of this view, further research may supply a final answer. Diamond's study (1) gives only reports of subjective feelings of change in radical personalities, reports which we know to be of dubious validity. Diamond has not correlated his data with length of radical affiliation. Our own material, likewise, can only be said to suggest that such tendencies may exist. It is, however, worth while to observe that culture changes, and personalities change in relation to culture. In a world in which secondary-group contacts have assumed a dominant rôle, adjustment of primary-group tensions may now be satisfactorily accomplished in this fashion. The day in which such tensions expressed themselves in primary-group relationships is perhaps passing. Henceforth, it may be expected that economic tensions will cause more maladjustments than before and, conversely, that the substitutive value of socio-economic integration may be greater than previously.

Finally, we should like to emphasize two points: one, that these results do not indicate that radicals are neurotic; and two, that they are not an evaluation of radical ideologies as such. With regard to the first point our data show as many symptoms of maladjustment among controls as among radicals. It is with the specific form of these symptoms that we have been concerned, Radicalism is an aspect of social change directly related to the functioning of

social institutions. We see no justification in our data for considering radicalism less closely related to mental health than is conservatism.

As regards the second point this study has no particular contribution to offer. The validity of socio-economic philosophies must be determined by facts outside the realm of individual psychology. The acceptance of radical doctrines is the only point with which we have been concerned. It may be worth while to point out that, since the fathers of our republic espoused radical ideas, it ill behooves us to put an unfair interpretation on the attitudes of those accepting radicalism (especially since our data do not justify it). The facts rather indicate that avowed radicals display certain forms of inferior adjustment, and that they display some forms generally considered superior.

Social problems and social movements will probably be with us for many years. It is unlikely that, even if we thought it desirable to set out upon a deliberate program of training children not to be radicals, we could prevent radical groups from continuing. There are certain combinations of developmental factors, socio-economic as well as personal, which "sensitize" the individual to the influence of radical groups, or to radical theory, in such a way as to cause radical patterns of individual behavior to continue. This, we think, will be true until a form of society is evolved which makes a more adequate adjustment of the needs of individuals to their socio-economic environment possible.

SUMMARY

1. An autobiographical schedule of 213 objective questions was administered to 56 avowed radicals and 97 non-radicals of approximately equal age, education, and economic status.
2. The outstanding finding was that the radicals thought of themselves as rejected by their parents. The objectivity of this rejection cannot be demonstrated in our data.
3. With regard to adjustment-mechanisms, about as many undesirable kinds are presented by the controls as by the radicals.
4. The radicals are distinguished by handicaps in meeting young people of their own age, by frustration in love relationships, and by a thoroughly evident pessimism. Their emotional responses are consistently weighted with unpleasant effect.
5. The radicals report more assumed inferiorities, but also claim more special aptitudes, than their controls.

6. Within the limits of our technique, such as are inevitable when utilizing conscious material, and material which retrospective falsification may easily have altered, we believe that our data show a developmental process which leads to a sensitization to radical theory and affiliation with radical groups.

7. These conclusions should not be extended to imply that radicals are neurotic. Neither should they be applied to the doctrines of radical groups.

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THE COMPOSITION OF THE FAMILY AS A FACTOR IN THE BEHAVIOR OF CHILDREN IN FIJIAN SOCIETY

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SYNOPSIS

The composition of a "larger" family group, as distinguished from the biological unit of the family, is a factor in the behavior of Fijian children. A study of Fijian society indicates that the happy, well-adjusted child is a member of a large family group which includes other children of his age.

Environmental factors involving the relationships between the child and other members of his family have long been the concern of students of child behavior, and much attention has been paid to the influence of the order of birth, the position of the only child, the effects of foster parentage and other similar subjects. The general theoretical importance of these factors rests upon the assumption that the family exhibits structural features and performs social functions differing in no essential way from those with which we are familiar in Western European society today. However, the family, in a biological sense, as a unit consisting of parents and children, does not everywhere have the same sociological significance, while the group which exercises the functions belonging to our European family does not necessarily resemble it in structure. Linton emphasizes the "sharp distinction which exists in many social systems between the reproductive unit composed of mates and their offspring and the authentic, institutional family." He continues, "It happens that in our own society these two coincide much more closely than in most. As a result European students have shown a strong tendency to assume that any grouping composed of father, mother and children must constitute the social equivalent of the family among ourselves. Actually such groupings play an insignificant rôle in the lives of many societies.... Nevertheless, all these societies which minimize the importance of the reproductive unit have other units which show a general correspondence in their social significance to the family among ourselves."¹

It is therefore apparent that in many societies the relationships of the child to members of these "other units" may overshadow

1. Ralph Linton, "The Study of Man." New York, 1936, p. 153.

in interest and importance his relationships to members of the biological family. As is well known, these groups, similar with respect to social significance to the European family, show throughout the world a wide variation in structure and personnel. The reproductive unit may be more or less ignored: the anthropologist is familiar with societies like that of the Minangkabau of Sumatra, in which the "family" is so organized that the father is almost completely excluded, while the mother is only one of a number of women whose duty it is to rear the child.² In parts of Melanesia the mere fact of birth does not determine the family to which a child belongs. On the Island of Mota in the Banks group, a "newly born infant becomes the child of the man who pays the chief helper or midwife at birth,"³ and we are told that it frequently happens that some man other than the father makes the payment. Where adoption is common the biological parents may be entirely without social importance for the child, as is often the case in Wogeo,⁴ an island off the coast of British New Guinea; or the child may acquire in addition to his own father and mother, a pair of foster parents, all of whom share the responsibility of bringing him up.⁵ In many societies, while the group composed of parents and children is not disrupted, the boundary lines of this biological unit are extended to include a number of other related individuals; usually members of either the patrilineal or matrilineal line of descent exclusively are singled out for this purpose, and we find in some cases that the family in a sociological sense is composed of a man and his wife, together with his sons, his sons' sons, and their wives and children. Since usually in such societies relatives are grouped together terminologically according to the so-called classificatory kinship system, the father's father's brothers' sons and the father's brothers are "fathers" in addition to the biological male parent, while the children of all these men are siblings. Other relationships are extended in similar fashion.

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2. E. M. Loeb, "Sumatra, Its History and People." Wiener Beiträge zur Kulturgeschichte, Vol. 3, 1935, pp. 99, 105, 117.
 3. W. H. R. Rivers, "The History of Melanesian Society," 2 Vols. Cambridge, 1914, Vol. I, pp. 50-53. Unfortunately we are not given any statistics with reference to this point but Rivers remarks "No Mota man is ever wholly free from doubt as to his real parentage." Rivers has also given us some very interesting information with regard to actual cases of adoption which he had the opportunity of observing.
 4. H. I. Hogbin, "Adoption in Wogeo." Journal of the Polynesian Society, Vols. 44, 45, 1935, 36. In one village Hogbin found that out of a total population of 52, 18 had been brought up by other than the real parents.
 5. A. R. Radcliffe-Brown, "The Andaman Islanders." Cambridge, 1922, p. 77 et seq.

It is obvious, I believe, that differences in the structure and personnel of the family may vitally affect the importance, for the behavior of children, of such factors as the order of birth, foster parentage and the lack of siblings. Foster parentage in Mota, where the mere facts of procreation and parturition do not make the father and mother the parents of the child, can hardly be compared with foster parentage among ourselves. In a society where family lines are extended so that the group of brothers and sisters includes the father's father's brothers' sons' children and the father's brothers' children, a child is very seldom the first born or the last born and an only child is a rare phenomenon indeed. On the other hand, it is to be expected that in societies where the family differs structurally from the biological unit, the factors which are important in a study of the behavior of children in our own society might be replaced or their significance modified by other factors, the exact nature of which would depend largely upon the particular type of family organization, the composition of the household, and especially upon the customary methods according to which the child is reared as well as the general attitudes toward the child.

In Fijian society⁶ we have an example of one of the types of family grouping, mentioned above, in which the biological unit is to a certain extent lost sight of within a larger group composed of individuals related through the male line. I hope to be able to demonstrate that the composition of this larger group is a factor in the behavior of Fijian children, and that variations in the personnel of particular families are related to variations in the behavior of individual children. Before discussing this material it is necessary to have a more detailed picture of the family in Fijian society and some knowledge of the treatment of children.

Fijian kinship terms are extended very widely along both matrilineal and patrilineal lines. The child, when he is old enough to be instructed in such matters, finds that there is a proper relationship term for nearly every individual with whom he is likely to come into contact. The term for grandparent has reference to both sets of grandparents, and to all the brothers and sisters of these; with his father he groups terminologically all the men whom his father calls "brothers," and with his mother, all of her "sisters,"

6. The material on which this paper is based was collected while I was in Fiji in 1935-36, as a pre-doctoral fellow of the Social Science Research Council. Since Fiji has not a uniform culture I wish to emphasize the fact that the paper deals with conditions existing specifically in Namataku, one of the northern districts of the province of Tholo west on the Island of Viti Levu, in which locality I lived for about 10 months. Most of this time was spent in the village of Nasauthoko, to which the detailed information refers.

the children of these people are his brothers and sisters. There is a kinship term for all the women who are sisters to his father, and another one for his mother's brothers; their children are grouped together and distinguished terminologically from his siblings. With many of these individuals he is so remotely connected that no relationship can be traced genealogically, and the social functions appertaining to the various relationships have become weak. Within this wide circle a smaller and more important group of kindred may be distinguished. Although the terms are extended to include a number of individuals, the Fijian classifies his brothers under two headings, the "true" (*ndjina*) and the "distant" (*vayawayawa*); his "true" brothers are the sons of his father's own brothers and his mother's own sisters, as well as his own brothers; his father's brothers are grouped with his biological parent as "true" fathers, etc. To his "true" kin he is closely related by consanguinity and strongly bound by mutual duties and privileges.

Fijian society emphasizes the patrilineal half of this group of relatives. Marriage, except in very few instances is exogamous with respect to the village and normally a woman goes to live with her husband's people. Although the child frequently visits his mother's village and throughout his life enjoys a special position there, his home is in his father's village. Furthermore, since in Fiji descent is patrilineal he derives his status from his father's side. Through this parent he acquires membership in a *matangali*, or clan, an exogamous group composed of descendants in the male line from one spirit ancestor. The *matangali* is the land-owning group and the members of one clan are more or less localized in one village of which they are the owners although usually, members of several foreign clans will be found occupying a village together with the owners. The *matangali* is subdivided into a number of smaller groups, called *mbito*, and each *mbito* theoretically is composed of individuals descended in the male line from one of the sons of the spirit ancestor of the clan. Although members of such a group consider themselves closely related, the *mbito* is actually made up of various lineages which frequently cannot be linked genealogically. According to the principles of kinship, all men within the lineage, the *mbito* and the clan of the grandfather's generation are grandfathers; all those of the father's generation are fathers, all of whose wives are called mother; and the members of one's own generation are either brothers or sisters. As a result of both village and clan exogamy, and the localization to some extent of the clan, this group of related individuals will be found living together in the village.

In attempting to determine, on the basis of social function, which individuals out of this extended group may be set apart as the family, we find that it is difficult to draw lines by which certain relatives are included and others excluded. The biological nucleus cannot be separated on this basis from the unit composed

ideally of a man and his wife, his sons and grandsons, and their wives and children. We might regard this patrilineal group of "true" relatives as the socially significant family, but in many cases more distantly related individuals in the lineage, the mbito and the clan, tend to play the same rôle as members of the more closely related group, so that it is difficult to say theoretically where the family begins and where it ends.

Some details regarding the composition and extensions of actual groups will illustrate this principle. In one case the unit which functioned as a whole consisted of an old man and his wife, his son with his wife and children, an unmarried daughter (genealogically his father's brother's son's daughter) with her illegitimate child, and a grandson with his wife and child. This circle of individuals was by no means a closed one. With few differences, the ties that existed between members of this group also bound them to fellow members of the mbito, within which could be distinguished two other groups, one of which belonged to the same lineage, while the other had no genealogical relationship. All individuals in the mbito formed a large, loosely cohesive unit which occupied one corner of the village. Within the same clan was another mbito which in this case was co-extensive with a family group composed of three brothers, two of whom had wives and children, their widowed mother, and a widowed sister with her children. These people lived at the same end of the village but across the central green from their fellow-clansmen in the other mbito. Within the entire clan the links binding the members of one mbito to those of the other differed only in degree from those binding together the members of one mbito.

Such wide extensions are possible of course only when there are a large number of individuals in the clan. It frequently happens that where a clan is represented in a village by only a few members, the functional family group, the mbito, and the clan each have the same composition. In one case the members of one biological unit were the only representatives of the clan living in the village.

In most cases the household group coincides only roughly with any of these units. In one instance a man and his wife, his son with his wife and children, a daughter with her illegitimate child and a grandson with his wife and child lived together in one house. This however is not so typical as representative of an ideal type of household. In other instances married men with their wives and children occupied separate houses, while in one case, members of three different clans lived together under one roof.

It will be seen that the child is normally born into a rather large group of people, and even during the first moments of his life is brought into contact with a number of his relatives. From

the beginning the various members of this group play important rôles in his up-bringing. His mother is assisted during parturition by her husband's mother, and his brothers' wives. At night they stay with her in the house and all the women, sleeping by turns share the responsibility of watching over the child. The Fijian baby, who is suckled only by his own mother, is given the breast whenever he seems to be hungry and is never allowed to cry if he can be soothed in any way. Most of his waking hours are spent in the arms of some adult and everyone is eager to fondle and pet him.

For a rather indefinite period lasting from about six to eight months, the mother devotes her entire time and attention to caring for the infant. During the first month or so, the baby is kept secluded behind a curtain of barkcloth which shuts off one corner from the rest of the house. The end of this period is marked by a small feast, after which the whole house is open to him. Sometime later he is taken out doors for the first time, which event is also the occasion for a feast. During all this time his mother never leaves him; she does no work in the gardens and takes no part in the cooking and other domestic tasks. Her husband's female relatives, or if necessary, other women in the village keep her supplied with water and cooked food and see that her gardens are not neglected. Finally when the child is about six or eight months old a feast is made, the feast of "touching the pot," after which the mother may resume her household duties. From now on the child is given more and more into the care of other relatives. Babies in Fiji are not taken to the gardens and during the long hours when the woman is looking after her crops the child is left in the charge of one of his other "mothers"; or perhaps his grandmother or a young sister takes care of him. Usually weaning takes place, rather gradually, when the child has learned to walk. It is taboo for the mother to have intercourse with her husband until the child is able to walk about; if she breaks the taboo and becomes pregnant before this time she must wean the child abruptly. As he grows older and becomes more and more independent physically the child is largely deprived of his mother's attention. Up to this time he has never been left to himself; his training has not been such as to encourage self-reliance, and he therefore turns to the older children in his group for care and companionship. Until he is perhaps six or seven years of age and old enough to be more or less an independent member of the play group composed of all the children in the village, he is dependent upon his older brothers and sisters, who spend much of their time in caring for him.

That the "family" units in this society show considerable variation in personnel is evident from the previous discussion of the social groupings. It seemed to me, after some months spent in living among the children of Nasauthoko, that differences in the composition of the group, especially with regard to the presence or absence of young siblings, could be correlated with observable differences in the

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behavior of the various children. It is of some significance, I believe, that the happy, well-adjusted child is he who is able to count among his relatives at least a few brothers and sisters. However, in spite of the fact that a child is not limited in his contacts to members of the biological unit, but considers as his brothers and sisters the children of the lineage, the mbito and the clan, it is not always that even this wide circle of relatives includes children of his age.

Naraukawa, who, when I first knew him was about three years of age, had the misfortune of being the only child in his entire group of relatives. The clan to which he belonged was comparatively new in the region; his paternal great-grandfather had come to Nasauthoko as a youth after his own people had been defeated in war and remnants of the lineage which he founded represented the clan with only a few additions. Naraukawa's "family," headed by the son of this early settler, included his father and mother, his father's father's brother and his wife, and in addition two "brothers," grown men who were actually the sons of his father's father's brother's son, and two adult cross-cousins, who for various reasons were living in Nasauthoko. To this group there were also attached for practical purposes three other adults, two of them old women, wives of deceased clan members, and a man, the last of a lineage between whom, together with the other members of his clan, no relationship could be traced. Naraukawa, the only child in this whole group, was left to himself. All day he tagged along at the heels of his mother who was pregnant and too busy to pay much attention to him. He was shy of other children and, although most of the children were at first somewhat shy toward a newcomer, Naraukawa remained bashful and unfriendly long after I had become a familiar figure in the village. Occasionally some of the young men would take it upon themselves to organize a ball game among the small children, but while the others joined in cooperatively, Naraukawa after a few minutes invariably wandered away by himself. As far as my observations went, he was the only child who ever engaged in solitary play; I saw him on several occasions with leaves twined around his arms and a small stick in his hand, obviously pretending to be a participant in the spear dance. Altogether he was unhappy and ill-at-ease with other children and remained always on the outskirts of any play group of which he formed a part.

Another boy, Simeli, is an example of a child whose family group included several siblings but none of whom were able to assume the responsibility for him. His father, Alivati, the nominal chief of the tribe was a rather weakminded, ineffectual sort of man, who, after he had seen one group of children grow to maturity, divorced his wife and married a much younger woman. She was a native of Nasauthoko, and the sole survivor of her clan in that region. Perhaps for diplomatic reasons, Alivati came to live in the village of

his new wife. Here he and his wife and children, cut off from all other relatives, formed a family group which corresponded with the biological unit. Simeli, who was about two years old when I first went to Nasauthoko, was next to the youngest of four children. His mother devoted her time and attention to the baby, a sickly child who was then about eight months old. Simeli had another sister of about five and a brother of nine or ten. This sister was still too young to assume the responsibility for Simeli and the brother, who ordinarily would have been useful in this connection, was at school in a neighboring village. Simeli therefore had no one to look after his welfare. His mother was entirely occupied with her baby and gave little thought to Simeli. The unhappy little boy could always be found trailing along behind her, whining and screaming.

For the first three or four months of my stay in Nasauthoko, another "family" somewhat similarly composed was living temporarily in the village. Mbatl, who before her marriage, had lived in Nasauthoko, had come home to visit, bringing her children with her. Simioni, a lovable little fellow about six months old, was the pride and joy upon whom she lavished all her care and affection, with the result that his small two-year-old sister, Alisimeri, was completely neglected. Mbatl's older daughter, about five years old, was unable to be of much help in looking after the younger child, and since Mbatl belonged to the clan, already described, of which Naraukawa was a member, there was no one in her group of relatives who was in a position to look after Alisimeri. This child, like Simeli, was noted for her temper tantrums and crying fits. As she was living in a house directly across the village green from the one I occupied, I had an excellent opportunity to see and hear her. It can be said, without much exaggeration, that not an hour of the day went by which failed to provide her with an occasion for tears.

In marked contrast to the behavior of these children is that of some of the other children with whom I was acquainted. Roro, the illegitimate daughter of an unmarried deaf and dumb woman was about the same age as Naraukawa. Like him she had no brothers or sisters of her own; but, although her mother had never married, she belonged to a family group, composed principally of her mother's brother's people, in which there were a number of children, her cross-cousins, among whom she took her place. Roro was a charming child, happy and friendly and always eager to take part in the games. The older girls would sometimes gather on moonlit nights at one end of the village green and sing, clapping their hands in time to the music to make the younger children dance. I remember clearly how Roro, on one such occasion, danced easily and confidently with individual and very clever steps which she had originated, while the older girls complimented and encouraged her, and the other children endeavoured to follow her lead.

We can find a parallel to Alisimeri in Litciana, who also had a younger brother, but here the comparison ends. Litciana fortunately had three older sisters of her own, one a girl of twenty and the others about eleven and nine. In the same mbito were numerous other relatives and her sisters in the mbito joined with her own sisters in caring for her. They all apparently took a great delight in carrying her around with them. It was one of their favorite pastimes to teach her to speak, and they often amused themselves with her quaint mispronunciations. Litciana very rarely had any occasion to cry, her wants were satisfied immediately and her nurses kept her happy and contented.

Other instances of such children might be mentioned. The fact that in every case the happy, well-adjusted child was one of a large family group which included other children has led me to conclude that the composition of the family group plays some part in determining his behavior.

It need not be emphasized here that this factor is only one of many which must be taken into account in attempting to picture and interpret the total personality of the child. For some of the cases which I have discussed other factors may be pointed out as of probable importance in the development of personality. We know that both Simeli and Alisimeri were weaned suddenly and before the usual time and it is not impossible that this treatment was responsible for some behavior difficulties.⁷ The personality of the parents is a factor which should be taken into consideration; it is probably not without some significance that Naraukawa's mother was a conspicuously shy woman and that Simeli's father was recognized as "womanish" and weakminded by his fellows. The fact that Naraukawa was cross-eyed and generally very awkward may have been important in his development, but it must be mentioned at the same time that another child, a little girl whose general behavior was in marked contrast to that of Naraukawa, was handicapped by a club-foot.

However, it has not been my purpose in this paper to discuss all relevant factors or their relative importance in the behavior of these children. I have tried to point out that in societies where the organization of the family group differs from our own, it is to be expected that environmental factors which are important in the development and behavior of children in our own society will be modified or replaced by others. The Fijian material bearing upon this problem will, I hope, serve to emphasize its reality.

7. As was noted above, a woman who has become pregnant before her child can walk, must wean him abruptly. At first she refuses to let him have the breast, but if he continues to cry she rubs the nipples with the juice of the chili pepper and tells him that it will burn and sting and make him sick if he continues to feed.

SOCIOMETRICS AND THE STUDY OF NEW RURAL COMMUNITIES¹

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SYNOPSIS

The present study demonstrates the value of sociometry in the administration of rural resettlement communities. Dyess Colony, the largest of the resettlement communities, is one of seven rural resettlement projects being studied by the Division of Farm Population and Rural Life of the United States Department of Agriculture. Analysis indicates that in the selection of settlers for such projects candidates who either have not moved or have moved infrequently, have several children of school age, and participate in the activities of the institutions in the old community should be chosen. With such families the community tends to become more integrated.

The sociometric analysis proves that the informal associations in the new communities should be considered in

1. This is the first of a series of articles which will present phases of sociometric investigations being carried on by the Division of Farm Population and Rural Life in the United States Department of Agriculture under the leadership of Dr. Carl C. Taylor, initiator of sociological and economic investigation of resettlement communities.

The data and analysis here presented constitute a segment of the study of one community resettlement project. Six other resettlement projects and three other communities are being studied by the use of sociometric techniques. In all, some 1,500 families have been interviewed. It is proposed to study the formal and informal association patterns of families in these various communities periodically in order that changes may be analyzed. Also, other communities may be added to those now under observation in order that cultural areas or particular situations may be better represented.

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colony administration and policies. The introduction of community and neighborhood discussion groups which would allow dissatisfied individuals to get the facts about the administration is advocated. This would counteract the tendency for certain groups and individuals to circulate false information. It might intercept the rumors and misinformation which follow the "grapevine" or chains of relationships of would-be "movers" and "stayers."

The recently established rural resettlement colonies furnish excellent laboratories for sociological investigation. In the early stages of community development, settlers find themselves living together with neighbors with whom they are not acquainted. Long distances often stand between them and the communities of previous residence which contain their friends and relatives, churches, schools, and other social agencies upon which they were once dependent. New institutions to take the place of the old must be created. New friends must be found if a satisfying existence on the project is to be achieved. Dissatisfaction causes many to leave their new homes, and many of those who remain are far from satisfied. The present article deals with certain phases of community integration and community disintegration. One of the negative aspects of the problem, that of migration, is discussed first.

The factors responsible for voluntary population movements are sometimes easily discernible. This, however, is not always the case. When families decide to move many considerations are involved. As in the case of exchange or barter in the market place the moving families and individuals believe their actions will result in the betterment of their own lot. The thought processes involved in arriving at this conclusion are complicated; they furnish a field of psychological and sociological investigation worthy of the researcher's consideration.

Part I

WHY DID FAMILIES LEAVE DYESS COLONY?

When the first fieldwork for the study of Dyess Colony, Arkansas, the largest rural resettlement community in the United States, was done in May, 1936, there were 484 families in the colony. By April, 1938, 194 or 40 per cent of these had moved away.² Settlers on the project were largely from the lower tenant

2. Since the first families moved to the project in October, 1934 a total of 649 white families have lived in the colony at some time, of which 252 (39 per cent) had moved away by April, 1938. Of course, not all of these families have been there at the same time.

classes of all parts of the State, but they had been selected by the best available techniques.³ As shown in Figure 1 there was much fluctuation in the migration from the colony with the greatest exodus occurring in the spring and summer months. A socio-economic study of the colony revealed many of the factors which were influencing the migration.⁴ For the most part the factors leading to mobility originated within the project, yet it is not unlikely that at the peak periods of the moving outside attractions or available jobs were also influential.

Characteristics of Movers and Non-Movers

There were considerable differences in the characteristics of the families which left and those which stayed. Table 1 indicates some of these differences. In this comparison, mobility during the 5-year period previous to settlement on the colony was probably the characteristic of greatest importance. Previous to settlement, the families which left the project had moved more frequently and longer distances between 1930 and 1935 than had those which remained. The tenant and cropper families of the area are extremely mobile; many change landlords each year. One plantation manager in the vicinity of the project told the authors they were "just that kind of folks." To prove his point he told of the high turnover of settlers on the Dyess Colony where there were real opportunities and advantages,⁵ and where the management was much more solicitous

(Footnote continued) There has been a constant turnover. Originally, the colony was to have included 500 families but recently it was decided to have only 400 families until the colony became more firmly established.

3. Holt, John B., "An Analysis of Methods and Criteria Used for Selecting Families for Colonization Projects," Report No. I—Social Research Series, pp. 45-50, September, 1937, Washington, D.C.
4. Davidson, Dwight M., Jr., "People and Plans," 1938, unpublished manuscript.
5. The primary aim of this colony was to provide an opportunity for the selected families to become home owners and thereby obtain some degree of economic security. The terms of home ownership were relatively easy. Furthermore, the community provided modern facilities and services which were important in the life of a well-balanced community. A colony bank provided credit facilities and made working capital available. Experts in farm and home management were available to advise the families in the most efficient utilization of available resources. A modern well-equipped and well-staffed hospital provided medical care to which many of the families had never been accustomed, at a nominal cost. The school system was modern, adequate and would compare favorably with that found in urban centers. In addition a library was established, churches organized and the cooperative enterprises provided the store, cotton gin, and other services needed.

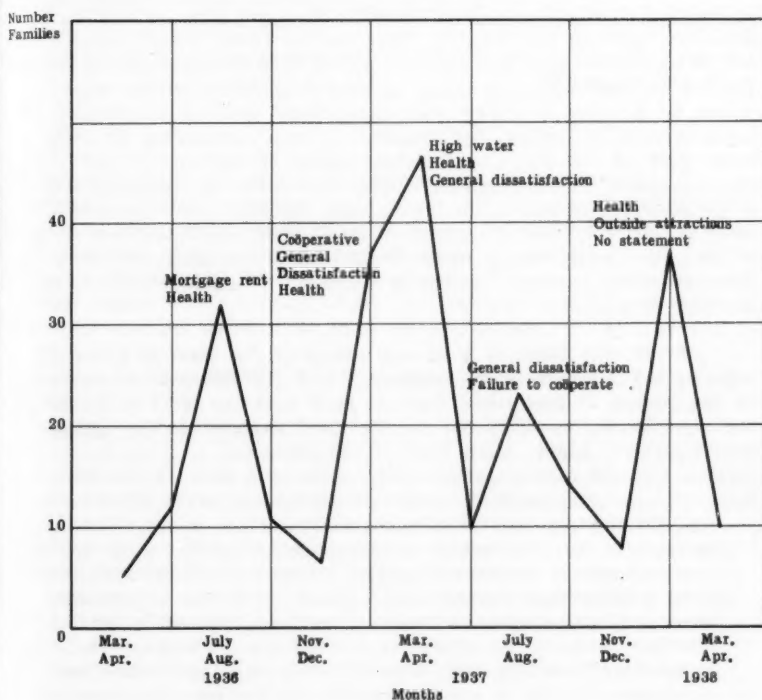


Figure 1. Number of families moving from Dyess Colony, Arkansas, by months with prevailing reasons for leaving as reported by the heads of the households to Project Officials, March 1936-April 1938.¹

1. Includes 252 families.

concerning the welfare of the settlers than was the rule on most plantations. "These folk just get the itch and want to be on the move. The grass is a little greener in the next pasture."

The families remaining on the project were older and larger, with a greater number of children of school age. There have been very few of the families living on the Dyess Colony who have been dissatisfied with the school, health, and library systems.⁶ Most families realized that the colony offered facilities of which they would be deprived in many other localities. With this in view, one could reasonably expect that families of such composition as could make greatest use of these facilities would be less apt to leave. Table I supports this assumption. The non-mover families had a greater number of children of the age groups for which the presence of these facilities is most important. Many instances have been related of how the family would have moved had it not been for the existence of young children and the availability of modern schools, hospital and library.

On the basis of a sample study of the level of living of some of the families before settlement and for others after settlement on the project it was found that in each case the level of living of the non-movers, as measured by the total value of family living,⁷ was somewhat higher than that of the movers.

6. In the early days of the project history, temporary quarters were used for the schools, attendance was poor and interest lacking. However, work was begun on the present facilities early in 1936. Now the system includes a central school (grades 1 to 12) and three ward schools (grades 1-3) all of which are conveniently located. The equipment is complete and modern and a staff of 23 qualified teachers, including an athletic coach are employed. It is generally admitted that the system is on a par with that of urban centers. It is far superior to the one teacher-schools with no transportation, and inadequate equipment to which many of the children were accustomed. The morale, spirit, and ambitions of the children have visibly changed in a very short time as the influence of this system has manifested itself. Older children, who prior to arrival on the project had dropped out of school, are returning.

The book circulation of the library is amazing. Few of the books are ever found on the shelf because there is a constant demand for most of them. For some it is a new experience to be able to secure reading material. Each afternoon after school the children line up to get books, sometimes for the entire family. Few of the families are without a library card.

7. Cf. footnote 4, Table I.

Table I

COMPARISON OF 252 FAMILIES REMAINING AT DYESS COLONY SINCE MAY 1936 WITH 169 FAMILIES WHICH LEFT DYESS BETWEEN MAY 1936 AND APRIL 1938¹

Item	Movers	Non-Movers
Average number moves 1930-35 ²	2.2	1.7
Average distance moved (miles) ²	102.6	85.6
Percentage of families reporting moves—1930-35 ²	79.7	75.4
Average number organizations contacted ³	2.07	3.0
Average number persons in resident family	4.8	5.5
Average age male head	34.5	38.0
Average years of schooling of male head	7.4	7.3
Average age of male head when married	22.4	23.0
Average number children 6 years of age and under	1.3	1.4
Average number children 4-18 years of age	1.8	2.6
Average number children 10-15 years of age	0.7	1.0
Average value of family living ⁴	\$713.	\$774.

1. Only the families for which data were available are included in this table, thus accounting for the differences between this and other tables in this report and between figures available in "Standards of Living of Residents of Seven Rural Resettlement Communities," Loomis, C. P. and Davidson, D. M., Jr., to be published by Farm Security Administration and Bureau of Agricultural Economics cooperating, Social Research Series Report No. XI.
2. Does not include the move of the family to the colony when settlement was made. A move constitutes a change of residence for non-farm families and a change of farm or plantation for farm families.
3. The average number of organizations contacted includes all organizations at which some member of the resident family reported attendance during the schedule year.
4. Davidson, D. M., Jr., *Op. Cit.* Thirty-eight per cent of the movers and 38 per cent of the non-movers had been living on the project one year previous to the interview: For these families the average value of family living for the movers was \$882 and for the non-movers \$907. The remaining families in each group reported the value of family living for the year previous to settlement on the project with an average value of \$609 for the movers and \$689 for the non-movers. Combining data for families reporting for a year's residence on the project with those reporting for a year off the project gives the figures used in the table.

The Sociometric Approach to the Problem of Moving⁸

It is doubtful whether the characteristics and considerations treated up to this point in the discussion can adequately explain why 40 per cent of the families interviewed in 1936 left during the next 22 months, and 60 per cent remained on the project. It is true that the ones who left were more mobile, were poorer economically, and had smaller families than was the case for the settlers who remained. Other causes for departure were of diverse nature. Table II indicates reasons for leaving which settlers gave to administration officials. However, it is seldom that a family decides to move solely because of any one specific cause or reason. If outside opportunities presented themselves, the families must have thought that there was a lack of similar or other opportunities on the project. If a flood discouraged families, security must have been visioned elsewhere. Significant in the present consideration is the fact that advantages and disadvantages were weighed not by isolated individuals, but by individuals in a social setting. Not only single families but groups of families were involved in the process.

The "grapevine" is an important news carrier at Dyess as it is on all other resettlement projects. Rumors circulate and gossip is prevalent in all of the local neighborhoods.⁹ These rumors and

8. The leader in the promotion of sociometry is Dr. J. L. Moreno. See Moreno, J. L., "Who Shall Survive," 440 pp. Nervous and Mental Diseases Publishing Company, 1934.

"Application of the Group Method to Classification," 2nd Edition, 1932, National Committee on Prisons and Labor, New York, "Sociometry in Relation to Other Social Sciences," Sociometry, Vol. I, No. 102, July, October, 1937.

9. On the other hand families which had left the project may have written back about good opportunities from the new neighborhoods in which they lived. In this instance they would naturally write their friends, thus making the association pattern as important as in the case of circulating rumors. However, the number of letters written to officials by former colonists, begging to be allowed to return, leads to the conclusion that moving from the colony was to a greater extent a matter of previous exaggerated dissatisfaction with conditions on the colony than anticipation of opportunities off the project. There are many illustrations of the manner in which false rumors led to dissatisfaction. For example, a Dyess project official whose integrity and honesty were beyond reproach, was advised by the doctor to take a vacation because of overwork. No sooner had he left than rumor spread over the project that he had absconded with several thousands of dollars of federal money which would have to be made up by settlers.

The junior author lived on the project 90 days in 1936 and 1938. In circulating among the settlers and project officials,

Table II

**REASONS 252 FAMILIES GAVE FOR LEAVING DYESS
COLONY, OCTOBER 1934 TO APRIL 1938¹**

Reasons for Leaving the Colony	Number	Per Cent
Total	252	100.0
Dissatisfaction or objections	95	37.7
General	32	12.7
To cooperative	16	6.3
To mortgage and rent	13	5.2
To high water and mud	14	5.5
On part of whole family	9	3.6
With project plans	4	1.6
With country	4	1.6
To furnish plan	3	1.2
Outside Attractions	39	15.5
Other work	25	9.9
Better chance off the project	5	2.0
Went to live with kin folk	9	3.6
Health	58	23.0
Illness	51	20.2
Death of one member	7	2.8
Non-Adaptation	24	9.5
Failure to cooperate and requested to leave	18	7.1
Not a farmer	3	1.2
Could not adapt self	3	1.2
Miscellaneous	9	3.6
Family dissension	4	1.6
Other	5	2.0
No statement	27	10.7

1. This includes all families and is not limited to families which were interviewed in 1936. These reasons for leaving were those taken from the records of the local administration. Each settler who moved was requested to give a reason and this was included in the records.

opinions circulate with great rapidity, usually changing and collecting numerous interpretations in the process. Oftentimes false notions concerning the disposition which was to be made of the settler's holdings or of the operation of the coöperatives were prevalent on the project. Too often the beliefs of the settlers with reference to future policies for the project were absurd, largely as a result of "grapevine" interpretations of happenings. As stated above, in an effort to analyze the problem sociometric techniques were employed.¹⁰

As a part of the formal investigation made in 1936, every family was requested to list the names of the families which came to visit, to borrow farm implements and exchange work.¹¹ Biological, economic, and sociological information concerning these associating families was available for comparison with similar information for the interviewed families. Moreover, such information was available for non-associating families living in the immediate vicinity of the interviewed families on the project. These data gave clues to the constituents of the "substance" from which groups are made. They indicated what elements in social situations could be considered as sustaining group integration and solidarity.¹²

The visiting relationships of families were classified into two principal categories: mutual and single or one-way relationships. If,

(Footnote continued) employees and school teachers, it was possible to learn a great deal which schedules and formal tools of research worker often fail to reveal.

10. Moreno, J. L., "Who Shall Survive?" *op. cit.* The problem was approached from a theoretical angle before the authors had become acquainted with Dr. Moreno and his works. In this, the conceptions of P. Sorokin, F. Toennies and E. Durkheim relating to the community and the bonds which maintain it, constituted the theoretical framework within which the investigation was made. Dr. Moreno's methods are used to great advantage in the analysis. Others used in the larger study have been invented by the authors.

It was believed that the dynamics of social organization could best be studied under conditions such as those prevailing in resettlement colonies, since in the early stages social bonds were at a minimum. Further, it was proposed to study the development of such social relationships. At all times these bonds were to be compared with those which existed in the previous community from which the settler came. To this end a special questionnaire was developed by means of which the bonds of informal groups could be analyzed by sociometric techniques.

11. 484 families were residing on the project and 421 usable schedules were obtained.
12. Loomis, Chas. P., "Extra Familial Relationships in American Settlements"—Address delivered at the International Congress of Sociology held at Paris, France, September 2-5, 1937.

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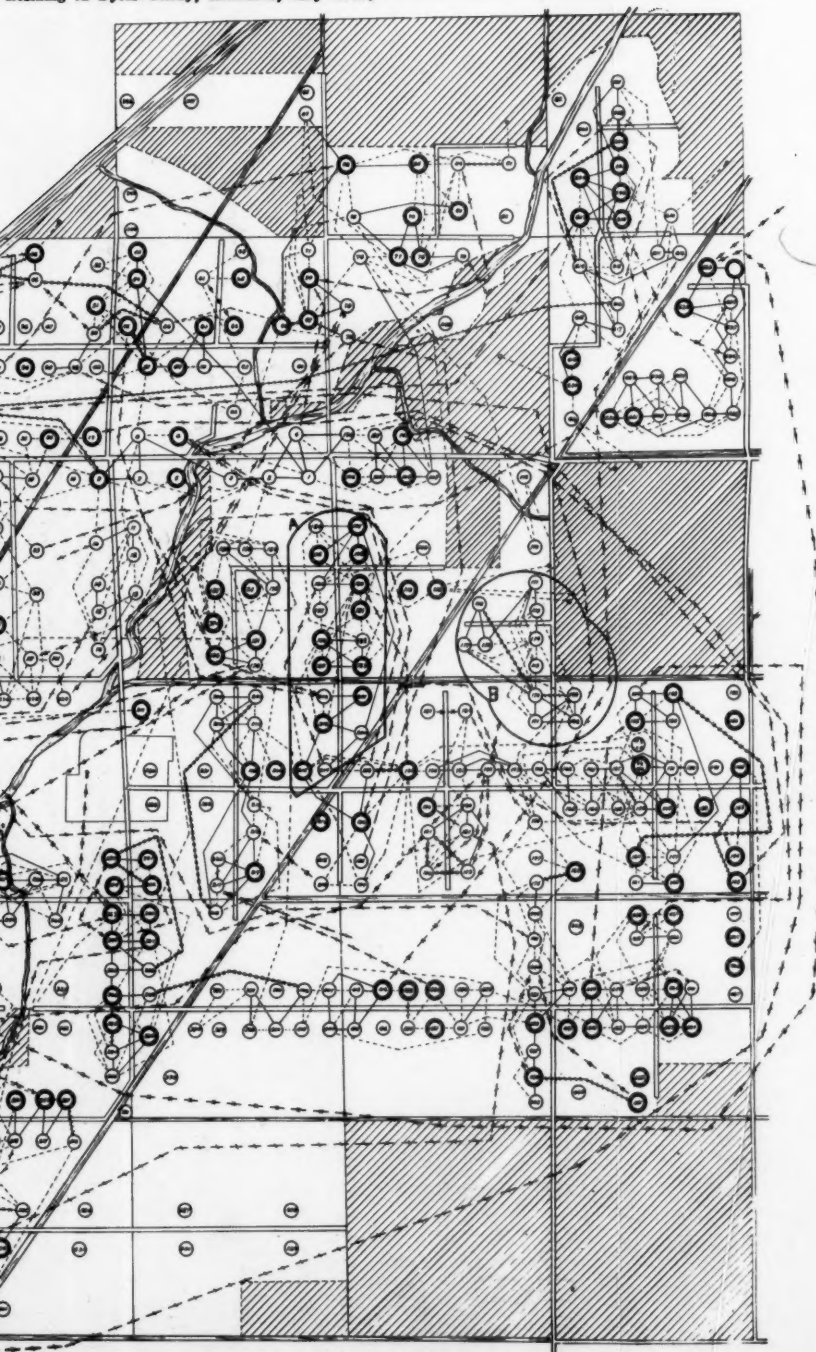
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Figure 2. Visiting Relationships of Families Residing on Dye



Residing on Dyess Colony, Arkansas, May 1936.



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when the head of a family (X) was asked to list the families which visited in his home, and he reported a, b, c, d, and e as visiting, these relationships would be single or one-way relationships unless a, b, c, d, and e reported that (X) visited them. In such instance, the relationships would be mutual. Table 3 classifies the relationships of movers and non-movers into these two categories.

The information concerning settlers' informal groupings as indicated by visiting was superimposed on the base map which indicated the exact location of the houses. Lines were drawn to designate (visiting) relationships: a solid line indicated a two-way or mutual relationship while the broken line indicated that the visiting was one-way.

At the time of the field enumeration in 1936 most of the families were new to the project and unacquainted, consequently geographic factors exerted great control over visiting. For the most part, visits were confined to the immediate vicinity, perhaps along the road on which the family lived. Sometimes drainage ditches formed barriers which restricted visiting since it was often necessary to travel a long distance around in order to reach the neighbor just across the ditch. In certain sections of the colony the families were almost geographically isolated, consequently most of the visiting was confined to the immediate area. The lines of visiting relationships, therefore, assume a pattern of short distance visitation along the roads within the immediate vicinity.

Special Groups of Movers and Non-Movers

If the map (Figure 2)¹³ is studied closely, it will be found

13. The rings represent the actual location of the houses in which the settlers were living at the time of the survey. The lines between these rings indicate the visiting relationships. A solid line indicates that both families reported the relationships. For example, the interviewed family X may have reported that family Y visited at the home of X. When the family Y was interviewed it reported that the family visited X. In such case the visiting relationship was mutual. A dotted line indicates that the interviewed family X reported that Y visited at its home but Y did not report that X visited Y. These mutual and single relationships have taken place between families which have formed their acquaintanceship since they have moved to the project and between families which were old acquaintances, or were related by blood ties. These different types of relationships are differentiated in the legend. For example, for family 202 in group A, there was a mutual visiting relationship with family 201, a single visiting relationship with family 203. Family 202 had been acquainted with families 138 and 259 prior to arrival on the project and reported a one-way or single visiting relationship with these families. All of the families with which family 202 reported visiting relationships moved from the project.

O—Non-Mover Families
 ⊗—Families Moving from
 Colony Between May
 1936-April 1938
 New Acquaintances
 ---- Single Relationship
 ——— Mutual
 Old Acquaintances
 + + + Single
 + + + + Mutual
 Relatives
 * * * * Single
 * * * * * Mutual

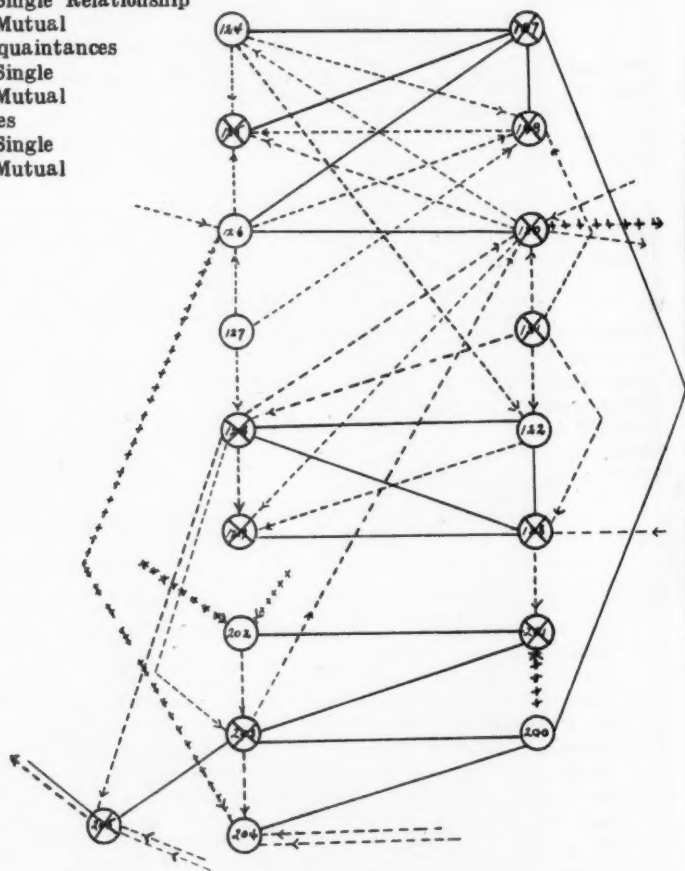


Figure 3. Association Pattern of selected group of 18 families as indicated by visiting relationships, Dyess, Arkansas, 1936.¹

1. See Figure 2 for an association pattern of the entire colony. On this map the 18 families can be located by the number of the house or by the group designation A.

that there are "in-groups" of movers and "in-groups" of non-movers.¹⁴ Movers tended to associate more frequently with movers, non-movers more frequently with non-movers than would have been the case if association had been random or subject to no factors other than chance.¹⁵ In certain areas on the project this was more pronounced than in others. For example, Group A (see Figures 2 and 3) is composed of 11 movers and 7 non-movers. Relationships in this group were predominately among movers. Some movers associated with non-movers, but such association was not as great as would have resulted from picking from a hat the names of the families in pairs. Analysis shows that the colonists in Group A came from sixteen different counties in Arkansas. Three families had previously lived in the same county; the remainder, fifteen settlers, each came from different counties. Six of the eleven families which moved gave essentially the same reason, objection to the mortgage plan, while two left because of ill health, one to accept employment elsewhere, and two because of general discontent. It may thus be seen that most of the families in this group were worrying about the same problems. It was these problems which were the subject of many rumors and much speculation.

Group B (see Figures 2 and 4) is composed of 10 non-movers and 1 mover. Exclusive visitation of non-movers among non-movers in this particular area on the project is relatively greater than would be expected under the random conditions previously mentioned.

Many other such groups could be selected to demonstrate the fact that moving from the project, or its counterpart, that of

14. The exclusiveness of these association in-groups would have been more pronounced if the association chart could have been kept up-to-date. Many movers left the colony a few months after the enumeration in 1936. Notwithstanding this, movers associated more frequently with movers and non-movers associated more frequently with non-movers.
15. Preliminary comparisons of the relationships as recorded in Table 3 and depicted in Figure 2 with a situation in which only chance determined the association have been made. Combining mutual and single relationships, the total 885 visiting relationships were classified as follows: Relationships between movers and movers 190; between non-movers and non-movers 449 and between movers and non-movers 246. If there were no factors other than chance operating, these 885 relationships should be classified approximately as follows: mover-mover 111, non-mover-non-mover 370 and mover-non-mover 404. All tests of significance indicate that the movers associated with movers and non-movers with non-movers more than would have been the case if only chance were determining the relationships.

O—Non-Mover Families
 @—Families Moving from
 Colony Between May
 1936-April 1938
 New Acquaintances
 ---- Single Relationship
 ——— Mutual
 Old Acquaintances
 + + + Single
 + + + + Mutual
 Relatives
 * * * * Single
 * * * * * Mutual

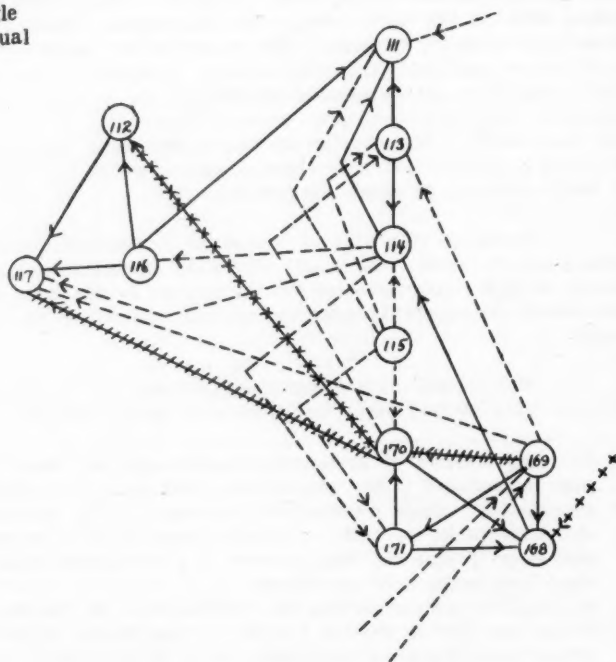


Figure 4. Association Pattern of selected group of 11 families as indicated by visiting relationships, Dyess, Arkansas, 1936.¹

1. See Figure 1 for an association pattern of the entire colony. On this map the 11 families can be located by the number of the house or by the group designation B.

remaining, partakes of group influence. Rumors concerning project management policies could be traced through the many channels indicated on Figure 2. Rumors become magnified, reworded and misinterpreted. Usually, groups which later moved from the colony were giving these rumors an adverse interpretation, conveying unfavorable impressions of the colony and its administration. Many families took these rumors so seriously that the dissatisfaction thus created was at least partially responsible for the family's moving from the colony. The settlers who remained were probably more critical of such rumors even though, as Table I indicates, they had no higher educational status than those who moved. Even outside agitation, stirred up by people on the outside of the colony with malicious intent, circulated with great rapidity along the grapevine. Again, some were selective and critical while others were receptive and uncritical.

Social Participation

In the selection of families for settlement much attention was given to the matter of socialization. Candidates for settlement who were deemed unsocial were usually rejected. The average number of visiting relationships of each family was 2.3 and there was almost no difference between the average number of relationships of those classified as movers (2.3) and those classified as non-movers (2.4). Thus, the mover families visited and were visited by almost as many families as the non-movers. This was true in cases in which the visiting was reported by both families (mutual relationships) and in cases in which visiting was reported by only one family (single relationship). Other data indicate that movers participated informally in social life on the project as much as non-movers.

Movers, however, did not support the formal agencies and participate in formal community life as much as the non-movers. In the study of the factors influencing association, the number of formal organizations in which the family participated was important.¹⁶ As shown in Table I the mover families participated in 2.07 organizations while the non-mover families participated in 3.0 organizations. It must not, however, be implied that the movers were more unsocial than the non-movers because of the failure to participate in as many organizations. More than likely it was due to the dissatisfaction of these families with the project and project institutions.

A comparison of the 25 most popular families with the 25 least popular families on the project indicates that the former had a higher level of living and had contacted a larger number of

16. It is recognized that this is a crude index of participation. It does not appraise the intensity of participation in each organization.

organizations.¹⁷ However, these two groups of families did not differ significantly in the proportion which left the colony from 1936 to April 1938. This supports the contention that popular as well as unpopular families left the colony.

Table III

AVERAGE NUMBER OF VISITING RELATIONSHIPS
REPORTED IN MAY 1936 BY 193 FAMILIES WHICH
MOVED FROM DYESS COLONY FROM 1936 TO
APRIL 1938, AS COMPARED WITH THOSE OF 291
FAMILIES WHICH REMAINED

Types of Relationships

	No. of Families	All Rela- tionships		Relationships Reported by Both Families		Single Relation- ships, Reported by One Family	
		No.	Ave.	No.	Ave.	No.	Ave.
Relationships of movers	193	436	2.3	169	.9	267	1.4
Relationships of non- movers	291	695	2.4	277	.9	418	1.4
Total	484	1131 ¹	2.3	446 ¹	.9	685 ¹	1.4

1. There were actually only 885 visiting relations included in the study. These are represented by lines on Figure 2 and classified as follows: 190 between movers and movers, 449 between non-movers and non-movers, and 246 between movers and non-movers. However, the 246 relationships between movers and non-movers belong to both groups and consequently are counted twice in this table making the total 1131. See footnote 15.

17. The total value of living of these 25 most popular families was \$829; that of the 25 least popular families was \$695. Annual clothing expenditures and number of organizations contacted by the most popular families were \$93 and 3.6 respectively; for the unpopular families \$69 and 2.7 respectively. The number of school grades completed by the members of the popular families as compared with members of unpopular families indicated no significant educational differences.

Table IV

CIRCUMSTANCES UNDER WHICH VISITING FAMILIES
BECOME ACQUAINTED, DYESS, ARKANSAS, 1936¹

	How Acquainted	Number	Percentage
Total		1615	100.0
A.	One or other party purposefully taking the initiative	623	38.6
1.	They came here and visited	312	
2.	We went there and visited	170	
3.	Just visited	141	
B.	Acquaintanceship made through meeting under fortuitous circumstances	360	22.3
1.	Met on inspection trip to project ²	112	
2.	Met in the road	71	
3.	Arrived at same time	29	
4.	Met at home of mutual acquaintance	28	
5.	Met at community center ³	25	
6.	While working on same project job	19	
7.	Happened to be in town together	17	
8.	While passing his or "my" house	16	
9.	Because of livestock straying	16	
10.	Through children	9	
11.	By chance in the field	8	
12.	Miscellaneous	10	
C.	Made acquaintance while participating in following co-operative activities	137	8.5
1.	Using other person's well	39	
2.	Helping to move in	31	
3.	Helping in case of sickness	27	
4.	Borrowing farm equipment	17	
5.	Borrowing household equipment	10	
6.	Helping with other work	8	
7.	Carrying mail	4	
8.	Co-operative purchase	1	
D.	Acquaintance made at formal institutional gathering	39	2.4
1.	Church	25	
2.	Home demonstration	7	
3.	Singing	2	
4.	Picnic	1	
5.	Miscellaneous	4	
E.	Miscellaneous conditions	41	2.5
1.	Do not remember	28	
2.	Relatives	7	
3.	Rehabilitation farm	3	
4.	They lived at home of interviewed family	2	
5.	First neighbors	1	
F.	Knew each other in community of previous residence	81	5.0
G.	Not given	334	20.7

1. The reasons given apply only to those families residing on the project in May 1936 and who reported visiting relationships.
2. All prospective settlers were brought to the colony by bus to inspect the project before a final decision was made. Large groups came at the same time and in such manner acquaintances were formed.
3. The administrative offices, store, post office, and other activities are located in the community center and usually there is much congregating in and around these points offering an opportunity for forming acquaintances.

Part II

CHARACTERISTICS OF INFORMAL GROUPINGS AND THEIR SIGNIFICANCE IN RELATION TO INTEGRATION

How Did the Families Come to Associate?

When a family is settled on a project without being acquainted with other families or without the opportunity to choose the new home site (holding) among old friends, what factors determine which of the neighbors will be selected as associates? Inspection of Figure 2 proves that the geographical factor was very important. Families struck up acquaintanceships with their near neighbors, visited with them, exchanged work with them, borrowed from or loaned to them. Table IV depicts the circumstances under which the visiting families became acquainted. Most of the acquaintanceships were formed when one family called at the home of the other or upon casual meetings of the family members.

Group Integration in Process

In the community of residence previous to settlement on the project, 57 per cent of the families visiting together attended the same local church.¹⁸ On the project at the time of the study, this figure was 48 per cent. In the old communities, 88 per cent of the families reporting visiting relationships had been acquainted for more than two years, whereas on the project only 13 per cent of the families had been acquainted previous to settlement.

In the community of previous residence 71 per cent of the families responding reported that they worked with the heads of the family visiting most frequently, while 70 per cent reported parents working together on the project. Sixty-seven per cent reported children playing with those of the visiting family in the old community, while 78 per cent reported children playing together in the new community. Twenty per cent of the visiting families belonged to at least one identical local non-religious organization in the previous community, as compared with 45 per cent on the project. From all indications, the integration of groups in the new community is in the process of development.

However, only 18 per cent of the families which visited most frequently with the interviewed families on the project were related by blood kinship. Thirty-nine per cent of the families which visited with the interviewed families most frequently in the old communities the year previous to resettlement were thus related. There

18. In this analysis the family visiting most frequently is the family which received the number 1 ranking based on frequency of visitation.

visiting among relatives took place chiefly with the paternal family or the family of a brother or sister. On the colony visiting among relatives was chiefly among families of brothers and sisters. This is to be expected inasmuch as families of similar age were selected for resettlement.

Since kinship is very significant in community integration and solidarity, considerable time may elapse before the new associations are as integrated as the old. A recent check-up¹⁹ study of the present association patterns at Dyess Colony indicated great changes in the original pattern as depicted in Figure 1. The families are traveling longer distances to seek friends who are socially and psychologically more compatible. When the interviews on which Figure 1 is based were made, only one or two of the families had cars. Now the number who have cars and drive considerable distances has increased. The geographical factor is becoming less important and the original smaller local geographical neighborhoods less integrated, but the associating groups on the project are less restricted geographically and are becoming more homogeneous and integrated.

Important Factors in Group Association

If family A continues to associate with family B, what are the factors which sustain this relationship? There are many approaches to this question. One of the approaches used in the present study is the following: All data relative to characteristics of A and B and other families which would seem to have some bearing on the association were gathered. Simple correlation coefficients were then computed for each factor or characteristic of the two associating families. For example, the correlation coefficient between the total value of family living of pairs of visiting families was computed to ascertain whether families of similar economic status either in the old or new communities tended to associate more than families of dissimilar economic status. As a check the correlation coefficient for the same item was calculated for a pair including the interviewed family and the family located geographically nearest but not associating. Also, pairs of families selected at random from the card index of names of families on the project were used in this process of correlation to check the results. Obviously, the correlation coefficient in these last two instances should be low. If the factor were an

19. For the check-up study in April 1938, a somewhat different approach was employed. The children in school were asked to list the names of families which visited their parents most frequently. In case the family had more than one child in school the list supplied by the oldest child was used. The schedule also required that the children list the names of their associates in order that the pattern of their associations might be determined.

important integrating agency for families which actually associated, the coefficient should be higher than for non-associating and random pairs.

Most of the results of this lengthy correlation problem were negative. Many coefficients of correlation were scarcely higher than those for variables between families selected at random. The highest coefficients were for number of organizations contacted, which for 392 pairs of visiting families on the project was .45. Coefficients for annual total value of family living, expenditures for clothing, and expenditures for social participation of families which visited were also significantly above the coefficients of randomly selected or non-associating families.

Although the results of the association analysis are only tentative, there are indications that factors related to formal group participation are significant.²⁰ Other factors which were used in correlation were number of children of 6 years of age or less, schooling of male heads, size of family, number of changes in residence in the last four years, and density of occupancy of dwelling. None of these last correlation coefficients were high. Of more importance was kinship, participation in the same social and economic organizations, and other attributes not presenting a continuum necessary for the calculation of Pearsonian coefficients of correlation.

However, the important psychological factors in the maintenance of associations must be left to future study. The authors are convinced that the basis of real friendship goes deeper than similar economic or social interests, or characteristics which may be easily measured.

Further Analysis of Association Patterns

These association patterns of the families living at Dyess Colony at the time of the interview were considerably different from the patterns in which the families had participated in their old communities. Table V indicates the extent to which the families who visited more frequently with interviewed families also participated in other types of neighborly activity, such as borrowing farm implements and exchanging work. Only slightly more than one-half of the families which were reported as visiting the interviewed family most frequently exchanged work and/or borrowed farm implements in the community of residence previous to settlement. Of families which had visited the interviewed families most frequently on the project, slightly more than three-fourths had exchanged work and/or

20. Clothing expenditures are usually positively correlated with the extent of group participation. Other significant coefficients point to this general conclusion.

borrowed farm implements with the interviewed families. Thus it is evident on the project that families which visited most frequently with one another were also more dependent on one another in other ways than was true in the old communities. This probably is to be accounted for by the fact that most of the farmers were tenants and consequently did not exchange work or borrow previous to settlement.

Table V

PROPORTIONS OF FAMILIES WHICH VISITED MOST FREQUENTLY¹ WITH INTERVIEWED FAMILIES ON DYESS COLONY, ARKANSAS AND WHICH EXCHANGED WORK OR BORROWED FARM IMPLEMENTS ON THE PROJECT AS COMPARED WITH THE COMMUNITY OF RESIDENCE PREVIOUS TO SETTLEMENT

	Previous Community	Dyess Colony
Number of cases of families visiting most frequently	412	410
Visited, borrowed, exchanged work	20.6	28.3
Visited, borrowed only	21.4	24.9
Visited, exchanged work only	9.7	12.5
Visited only	48.1	23.9

1. The families visiting the interviewed families were ranked according to frequency of visitation from one to five; the families visiting most frequently were more apt to have exchanged work and/or borrowed farm implements than families which ranked lower in their frequency of visitation. In this table only families with a Rank of Number 1 (most frequent visitation) are included.

The families reported as visiting the interviewed families were ranked according to the frequency of visitations; similarly, the families which exchanged work were ranked according to the number of days involved, and the borrowers of farm equipment were ranked according to the frequency of borrowing and the value of the implement borrowed. The families which associated most frequently with the interviewed family in any one of these activities were more apt to have engaged in the other two activities with the interviewed family. For example, less than one-fourth of the number 1 ranking visiting families failed to engage in borrowing farm implements and/or exchanging work with the interviewed family on the project. Three-fourths of the fifth ranking visiting families (or the families which visited the interviewed family only less frequently than four other families) failed to have either or both of the other two relationships.

This means that in general the families which associated most intensively in one of these activities also associated in the other activities.²¹

From this analysis the conclusion may be drawn that a given family A which associates most intensively with family B in one type of activity is more apt to associate or cooperate in other activities with this same family B than with other families. In rural social groupings of this nature, the principle of division of labor may not maintain. One cooperates and associates with one's friends in all activities where such cooperation is satisfactory enough to sustain the relationship even though other people might furnish more effective results. There are, of course, limits beyond which this principle does not apply. The final study of which this article is a part will indicate to what extent it does apply in various communities.

CONCLUSION

The families which moved from Dyess Colony were smaller, had less children of school age, and participated less in the institutions of the community than did those which remained. This suggests that in the case of share cropper families only those which are relatively immobile geographically, have children of school age, and participate in the community organizations where they are living at the time they are considered as possible settlers, should be chosen. Such families can be more easily integrated into a community and are less likely to leave. However, it is most important that the chain of informal social relationships on the projects should be studied. The present study conclusively demonstrates that such relationships are important. The families which remained and the families which moved away from the project, while living on the property, tended to constitute in-groups.

One possible method of overcoming the tendency of the dissatisfied individuals to circulate rumors and information which puts the project in an unfavorable light would be community and neighborhood discussion groups. If these discussion groups were conducted in a democratic manner by the settlers themselves, they would furnish an opportunity whereby facts might supplant misinformation and lies; furthermore, doubts and fears concerning the future opportunities might be minimized. Also, resettlement agencies must have definite procedures which are communicated to settlers and prospective candidates for resettlement in no uncertain terms. Rumors and anxiety prevail under conditions of uncertainty and inadequate information.

21. This principle held for both the community of residence previous to settlement and the project.

A NEGLECTED ASPECT OF MOTIVATION

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SYNOPSIS

The customary emphasis on the visceral sources of motivation leads to regarding the conscious motives of adult life as illusory. The real importance of such visceral sources is so modified by environmental circumstances that this general type of theory has had to fall back largely on "infant sexuality." The latter is in reality an example of primary motivation of non-visceral origin. When the animal mechanism is regarded as an independent source of motivation (characterized by demand for stimulation rather than demand for quiescence) a new approach is gained to problems of esthetics and other higher forms of motivation.

A. THE INADEQUACY OF VISCERAL TENSION THEORIES

The most commonly held view on the nature of motivation is that the overt, or "animal" behavior of an organism is performed in the service of visceral or "vegetative" functions. Kempf, in The Autonomic Functions and the Personality (1), has tried to show that the divergent theories of behaviorists and psychoanalysts can be reconciled in this way, and the measure of his success is great enough to show that there is indeed considerable similarity in the way in which these two schools, often considered the poles of psychological theory, deal with the problem of motivation. The behaviorists speak repeatedly of "visceral tensions" and the like as the "main-springs of behavior." And Freud's libido, whether one regards it as fundamentally physiological or not, still represents at least by analogy a sort of visceral drive, in whose service overt behavior is performed.

This similar point of departure leads both schools, despite their great difference in treatment of the genetic development of behavior, to a similar conclusion: in both, the "motives" and "purposes" of adult behavior are reduced to illusions, having only such value and significance for the organism as they borrow from their remote predecessors, the original visceral drives (or libido). Our immediate motives are seen as only the sublimations of the real drives. To the psychoanalyst, "Life consists of finding a series of

substitutes for the things we really want to do" (2). To the behaviorist, it consists in slavery to the stimuli associated with satisfaction of original drives, perhaps at second or third hand, but having no independent "value" of their own.

This question, whether the socially or culturally developed motives that play such a large part in our lives are to be considered as real motives, or whether they are only the masks, the instruments, or the perversions of the basic physiological tensions, is one of the most crucial problems in psychological theory. It is of paramount importance for the entire psychology of personality and all social psychology, in particular for all psychological criticism of social movements. Hitherto, only frankly idealistic theories (e.g., Spranger) have granted to social and intellectual motives the realness that they appear to possess in life. The present paper argues for the non-illusoriness of such motives from a materialistic standpoint, that is, without attributing to them any independence or of priority over the physiological functions of the organism.

In any theory that starts from the assumption that visceral drives are the foundations of all motivation, the importance of the various types of visceral tension must differ enormously. Frequently no mention whatever will be made, for example, of the need for air, which is quite as urgent as the need for water, food, shelter, body-waste elimination, or sexual satisfaction. The reason for this is obvious. "Air is free," and therefore rarely represents a problem to the organism. During suffocation, this drive may of course rival any other in intensity. But, as a factor in the control of human behavior it is insignificant. Without pausing to consider the forms in which it does occasionally enter into our lives, we may draw the important conclusion that the physiological urgency of a need is no indication of its importance in the development of behavior.

If we contrast with the need for air the need for warmth and shelter, we see that even when no extreme deprivation with respect to this need occurs it plays a much greater part both in our daily lives and as a determinant of our culture. There is scarcely a day when we are not motivated by consideration of warmth or coolness, heat or cold. They enter into our most routine acts, into the enjoyment of our food, into sex experiences, etc. This motivation plays an important part in the building industry, the fuel industry, the hotel industry, the clothing industry, etc. It is a major source of human motivation, principally because the earth's climatic conditions are such that man must constantly exert himself in order to avoid discomforts due to temperature.

However, if we would have made a mistake to conclude about the importance of a source of motivation (such as air) simply from a consideration of its physiological urgency, it would likewise be

an error to conclude about the importance of a motive simply from the relation of man as a physiological organism to the physical conditions of his habitat. The ease with which a drive is satisfied depends in large part on the social organization that serves to satisfy it, and this may be so perfectly organized, historically, that the physiological drive rarely comes to expression. In our society today, protection from extremes of temperature is provided very unequally. One man digs or builds a shelter with a view to keeping warm, while another bases his choice of residence on such factors as the social advantage of an address or conveniences for entertainment. Both have the same need for shelter, but for one this need simply does not appear as a psychological motive, any more than the need for air. Of two infants, one may undergo a good deal of temperature discomfort while the other is spared because it receives proper attention. One of these infants will be cranky, the other pleasant. Are the positive social responses of the latter due to the fact that it has been positively conditioned toward those who care for it, because at their approach his discomfort is removed? No, because the more perfectly the infant is cared for the pleasanter it will be. An absolute minimum of discomfort will provide the best conditions for the development of positive social responses, which must have their basis in some other factor than conditioning.

The physiological needs we have been considering are such that they can be kept permanently sated. The same is true of thirst. It is less true of hunger and sex, because of the rhythmic nature of the processes involved. Nevertheless, it is obvious that the same argument also applies to them, in large part.

The conditions of man's habitat determined that hunger should be the principal source of human motivation throughout the early history of mankind, just as it is the principal source of motivation for animals generally. Hunger gave rise to the basic industries of hunting, herding, and agriculture, which still occupy a predominant place in human society. It has been the cause of migrations and wars that have been epochal events in human history, and has played a considerable part in the development of trade and industry generally. However, man's increasing control over his natural environment makes the satisfaction of this drive ever more certain and more regular, so that it appears far less frequently and less intensively in individual experience, as a psychological motive. Though famines in China and India still take their toll of millions, and starvation and near-famine conditions are common enough even in "civilized" countries, the historical importance of hunger as a human motive has certainly diminished greatly. It is relatively unimportant even with respect to the revolutionary movement in advanced countries, where cultural needs play a larger part. It is not difficult to foresee its complete disappearance as an important historical factor.

As a result of this improved social control, the child is less exposed to the discomforts of hunger. Certainly there are millions of children to whom hunger is almost never an intense experience, although there are other millions for whom it is ever-present. There are millions of adults who so rarely experience hunger that they have no adequate conception of what it is, as a psychological experience. Their lives are so routinized, that they are always sure of a meal before their stomachs begin clamoring for the next. They know "appetite," but not "hunger."

Under these conditions, hunger, like the need for shelter, virtually disappears from our lives as an important source of psychological motivation. The behaviorists still build considerably upon it, pointing out in neat schemas that baby becomes positively conditioned to mother because she stills its hunger, but it is very doubtful that such conditioning is really an important factor in socialization, and it is certainly not the most important.

The most important factor is, assuredly, one that the Freudians have approached in the concept of infant sexuality. We shall defer our consideration of this for a moment, to close our discussion of the inadequacy of visceral drives to explain motivation by pointing out that our remarks about hunger also apply in large part to adult sex. However, there are some differences. Cultural and physiological factors combine to insure that almost every individual undergoes a period of intense physiological unrest connected with the maturation of the sex drive. But the process of adjusting to sex, like the process of adjusting to hunger, involves a decreased dependence on the visceral drive, and with the establishment of sex habits the easy formula that the sex-drive results from the accumulation of glandular secretions may become quite absurd. Certainly it is utterly teleological to describe sexual behavior as directed toward the release of a physiological tension, when every society abounds with cultural devices, from ritual dances to burlesque shows and glandular extracts that are designed to increase and maintain that tension.

B. THE SENSORI-NEURAL MECHANISM AS SOURCE OF MOTIVATION

Those who seek to reduce human motivation to a visceral basis are led inevitably to almost exclusive emphasis on sex, because under the conditions of modern life it is the only visceral factor that is the source of more than incidental physiological motivation. However, sex itself, as commonly understood, is obviously unsatisfactory, because the sex drive does not mature until an age when many social motives are already fixed, and because individuals who are totally lacking in it (still in the ordinary sense), such as eunuchs, show no lack of general motivation. To preserve sex as the basis of

human motivation, and thus to preserve the general schema of which we have spoken above, and not have resort to innate drives of an idealistic nature, it is necessary to have infantile sexuality. Freud, when he discovered that a sex drive in the usual sense could not suffice to explain the phenomena he studied, introduced this concept. However, if its full value is to be realized it must be freed from the mysticism with which it was surrounded by the development of the theory of the Oedipus situation, and given precise physiological formulation.

We mean by infant sexuality the sensual pleasure that the infant derives from physical contact with other human beings, and also, to a lesser degree, from the visual and auditory stimulation resulting from their activity around him. This pleasure has a non-visceral physiological basis, yet the term infant sexuality is justified by the fact that in adult sexuality there remains a tremendous component of this same sensuousness, which is quite independent of the sex organs proper. It provides the principal incentive for the early stages of socialization, which can never be properly understood if it is regarded merely as a process of conditioning based on the satisfaction of visceral needs by adults. Indeed, the techniques which children employ to secure the coveted social attention frequently involve considerable visceral discomfort to themselves, through near-suffocation or hunger. It would be difficult to understand how such behavior could be developed if the stilling of visceral unrest were the only important basic type of motivation.

The significance of the theory of infant sexuality is therefore this: that motivation which is fundamental, with respect to its importance in the control of behavior, the development of social responses, and the elaboration of cultural motives, does not arise solely from the "vegetative" functions, but on the contrary arises largely (and perhaps principally) from the "animal" mechanisms, from the sensori-neural-motor apparatus by which the organism maintains its relations with its environment.

Infant sexuality is the social aspect of a general characteristic of unlearned response to external stimulation. When we survey the results of research in this field, we meet at first an apparent contradiction. We are struck on the one hand by the astonishing complexity of native reflex organization in all the higher animals, including man. (Sherrington, Dusser de Barenne, Magnus, Hoffman, et al.) From this alone, we might be led to conclude that these reflexes are served by a very precisely charted nervous system of the telephone-exchange type, and that fairly limited injuries to the nervous system should produce great discoordination. On the other hand, however, studies of the effects of injury, performance after regeneration, transplants, etc., have shown that it is virtually impossible to disturb the fundamentally patterned character of an organism's

behavior (Bethe, Buddenbrock, Uexküll, Marino, Weiss, et al.). These investigations seem to lead at first to the conclusion that all that matters is the existence of connecting nervous tissue, and that the nature of the response is determined by the gross pattern of the organism. If we wish to arrive at some sort of generalization for both types of investigation, and for a general phylogenetic survey of unlearned behavior, we can come to something like the following: Except under rare conditions, and probably never independently of responses fixated through training, the response of an organism to any stimulus will be relevant to the stimulus, in the sense that the effect of the response will be to vary the intensity with which the stimulus acts on the sense organs. This we can call the "principle of relevant response."

This principle has an extremely broad range of application. It embraces the scratch-reflex, and the spontaneous activity by which the animal meets the situation in which the normal scratch-reflex is impeded (Pflüger's classic experiment with the frog); the reflex adjustment of sense-organs, and the tropistic postural orientation toward a stimulus; infant sexuality, and a broader range of activity which may justly be termed curiosity behavior. The latter may be defined as consisting of varied motor responses which supplement the sense-organ adjustment, and tend to prolong and intensify the effectiveness of stimuli. It is characteristic of all the higher animals, in increasing degree with increasing richness of the sensory and motor apparatus. Lewin's phrase, Aufforderungscharakter, can also be used with value in describing such behavior, in which the stimuli have, prior to all experience with them, a positive demand-character.

Holt has recognized the importance of the type of behavior we describe, and called it "adient behavior" (3). He has also shown how closely it is related to the problem of motivation, and in his discussion he gives external stimulation equal place with internal visceral stimulation as a source of motivation. However, the tendency of his argument is to escape the dangers of teleology by making motivation secondary to learning, and hence he regards adient behavior as the consequence of the reflex-circle, a process whereby any response tends to become conditioned to its own effects, and thus to repeat itself.

In our view, the true relationship is the reverse of that which Holt assumes: relevancy of response, which is assured by the organismic structure, makes learning possible and in a large measure directs it. This interpretation is supported by the fact that relevancy is characteristic of the behavior of the lowest organisms, where learning is absent or quite rudimentary. In learning, the original immediate relevancy is suppressed in order to achieve a remote relevancy to some other factor with which the immediate stimulus has been associated in experience.

Holt neglects the evidence that relevancy (adience) persists despite interference with the response mechanisms. For example, Baldus has shown that the forced circular movements of an insect that has had half its brain removed, toward the intact side (a type of relevant response), persist even if all the legs on the side from which it turns are broken off. The insect makes abnormal use of the legs on the intact side, whose normal action would turn it in the opposite direction (4). In such behavior relevancy seems clearly to take precedence over established connections, so that it cannot be reduced to a consequence of the latter.

Now, this control over the course of behavior by the relevancy or effect of the response is precisely what we mean by motivation. By a "source of motivation," we mean a physiological mechanism whose activity does not merely determine that the organism shall be active, but that its activity shall modify the conditions under which this particular mechanism operates. It is not enough to say, with Holt, that "as a man drives a horse, so the man himself is driven to action by the moment-to-moment irritation of sense-organs, without and within" (5). The action of sense-organs does not merely release stored-up energy, but helps to determine the manner in which it shall be expended. Hunger and sex drives result from mechanisms of this sort. But virtually every type of external sensory stimulation can play a similar rôle. An especially interesting illustration, with which we can close this part of our discussion, is the case of mild pain, which has the same positive demand-character as other mild forms of stimulation. Animals as well as humans rub sores, lick wounds, scratch bites, and otherwise respond to various qualities of painful stimulation with relevant responses that heighten this stimulation, and thereby bring relief. Few of us have the will-power to resist scratching an itch—and liking it!

C. THE HIGHER FORMS OF MOTIVATION

The demand-character of a stimulus object does not depend on any character inherent in it, but on the organization of the perceptive mechanism. Our contention is that this organization therefore represents a physiological basis for human motivation which is far more important than it is usually recognized as being, when principal emphasis is placed on the visceral drives. When contemporary psychology rejected the hedonistic tendency which had been dominant in most modern psychology, and replaced this with the concept of visceral drive, it did not reach a completely satisfactory solution. Perhaps a more satisfactory approach to many problems of motivation can be gained by recognizing that the sensori-motor organism does not merely function to satisfy its vital needs, to adjust itself to its environment in the sense of securing what it needs for life and growth, but that it also demands stimulation, demands the

opportunity to react in ways that force the environment to stimulate it, that this "demand" is a characteristic of its physiological organization. Self-stimulation is as fundamental as self-preservation.

Infant sexuality is the first factor of this sort to be given an important place in modern psychology. We have tried to point out that it is only one important example, which shows the importance of the "animal" mechanism for motivation. Although it is true that in an evolutionary sense the "animal" mechanism was developed because it served the "vegetative" functions, it is no longer possible to consider its activity from this aspect alone. It has become a source of independent motivation, and its relative importance increases as, with the advance of social techniques, the gratification of visceral drives becomes easier and more certain.

It would be an error, however, to assume that this exhausts the primary sources of motivation. We have only indicated the direction that must be taken in order to study them adequately. The "itch" that commands attention need not necessarily be a simple skin sensation, or the simple stimulation of any other sense organ. With increasing complexity of sensory organization, the pattern of stimulation becomes an important factor. With increasing elaboration of the nervous system, and the consequent increase of intra-neural stimulation, the physiological basis is given for the appearance of native "intellectual motivation"—not of course in the sense of any innate ideas, but in the sense of a need for manipulation of the content of awareness, comparable to the child's need for physical manipulation of objects and to the physical play of both animals and humans. This field is one in which it would probably be easy to slip into error by pushing too hastily forward, yet to the writer it appears certain that this factor will have to be taken into account before anything like an adequate psychology of motivation, or of esthetic experience, will be written. I shall close with two very brief indications of how this viewpoint can be applied to problems in this field.

First, this type of motivation undoubtedly provides a large part of the foundation for collecting activity, and hence those who have spoken of a "collecting instinct" were probably not so far from the truth as those who have tried to reduce such behavior entirely to a habit basis.

Second, the element of "beauty" must be regarded as subordinate in esthetics to that of "stimulation." The hedonistic view in psychological theory has its parallel in the beauty-cult in art. So deep-seated is the conviction that art and beauty are the same, that even today, when the theory is already belied by the productions of many artists, the idea still dominates among these very artists themselves. There can be no question that this false theory often hampers the work of the artist, who does not understand the nature of the

effect that his work has on the spectator, and similarly interferes with proper appreciation by the latter. Some artists have turned to psychoanalysis for a solution of their problem, with consequences that lie outside the scope of this paper to discuss. From our viewpoint, a sound esthetics must look upon art as a social form of satisfaction for the need for stimulation. In different historic periods, the type of content and of style that can perform this service changes, according to the dominant interests of the period, and the types of perceptual acuity developed in consequence. However, just as physical pain can sometimes be the basis of pleasure, so consummate ugliness can be a high form of artistic expression.¹

In general, our understanding of social and cultural motives should be greatly improved when we give up the effort to reduce each of them to an ultimate visceral (or libidinous) basis, and recognize that although they often represent fairly remote developments from their genetic origins, they are not as a rule fantastic aberrations.

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1. E.g., Picasso's "Guernica"; see Cahiers d'Art, 1937.

GROUP DIFFERENCES IN NATIONALITY AND RACE PREFERENCES OF CHILDREN

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SYNOPSIS

Previous investigations of race and nationality attitudes have had as their chief concern the improvement of methods of measuring attitudes. This study uses the sociological method in the selection of subjects examined and the psychological method as the measuring instrument. A large sampling of 2422 school children in St. Louis were tested by the Thurstone Paired Comparison Scale for judgment of racial, religious and national groups. Sigma unit scaling of combinations of children in different groups (rural, urban, rich, poor, white, negro, Protestant, Catholic, Jew) serve as the basis. The study reveals differences and similarities between adults' and children's attitudes.

What nationalities and races do American children favor? Do they favor nationalities which are dominantly Fascistic, Communistic, or democratic in their present form of organization? Do they prefer to associate with French or Germans? Italians or Russians? Japanese or Chinese? How do Nordic nationalities compare with other European nationalities? Are there significant differences between the nationality and race differences of rural and city children? Between Protestant, Catholic and Jewish children? Between rich, poor, and middle class children? Which children are more nationalistic in their outlook? Which has more national tolerance? These questions indicate in general terms the nature of the problems investigated.¹

1. The writer is indebted to many individuals for help which made possible the bringing of the present study to completion. His first indebtedness is to Mrs. Myra F. Dubinsky who was particularly helpful in preparing the study for publication. Others who have helped with the scoring or statistical work are Mr. Ernest Haveman, Mrs. Alice E. Hellman, and a number of F.E.R.A. workers sent by Dean F. M. Debatin of Washington University. For coöperation of school authorities the writer is indebted to the following: Dr. Henry Gerling, Superintendent of Schools; Mr. George R. Johnson, Director of Tests and Measurements; and Miss Mathilde C. Gecks, Assistant Superintendent. To all teachers and children who coöperated the writer expresses his gratitude.

Previous investigators of race and nationality attitudes who have applied psychological methods have had as their chief concern the improvement of methods of measuring attitudes.² Investigators applying sociological approaches have by and large concerned themselves with social situations influencing types of prejudice³ or with race or nationality attitudes as forms of social distance.⁴ Furthermore the more objective studies of the problem have been made on adult groups. Accordingly, in the present study an attempt is made to use the advantages of the sociological method in the selection of subjects examined, and the advantages of the psychological method in the reliability of the measuring instrument used.

THE CHILDREN AND GROUPS STUDIED

All of the 2422 children studied were selected because they were representative members of some well-defined social, economic, or religious groups. The composition of the population studied included the following groups: (1) 1265 public school children ranging in grade from fifth to eighth with approximately the same number from each grade. Of these 320 were from two schools located in a very poor neighborhood;⁵ 769 were from three schools located in middle class districts; 176 were from one school in a well-to-do neighborhood. (2) 364 children from a representative school for colored.⁶ (3) 246 children from three rural schools located on outskirts of St. Louis County. (4) 503 children from Sunday Schools—94 Catholic, 144 Jewish, 268 Protestant.⁷ (5) 44 children from a non-denominational private school. This study was made in 1934, and in interpreting the results it is well to remember the events that prevailed during that period in the international scene.

PROCEDURE

The original plan was to study the problems of nationality preferences by the use of three supplementary methods: 1. The

2. Witness, for example, the emphasis on psychophysical methods expressed by Thurstone (16) and Guilford (6).
3. Illustrative of this type study is that of Lapiere (9).
4. Popularized by the work of Bogardus, representative references of which are (2 and 3).
5. Ratio of poor, middle class, and rich in St. Louis reported in terms of percentages by Mr. Weissman of the Research Department in the Social Planning Council of St. Louis are respectively 15.6, 73.5, and 10.9. For a more detailed description of the three economic level neighborhoods used see Meltzer (11, p. 592).
6. Percentage of colored in St. Louis is 11.4.
7. Estimated percentages of Catholic, Jews, and Protestant in St. Louis are 61.6, 9.5, and 29 respectively.

Paired Comparison Method as described by Thurstone, for its statistical advantages. 2. A form devised by the writer to get information concerning the degree as well as direction of feeling for each nationality or race and statement of reasons for feeling expressed. 3. Individual interviewing procedure ranging from free association to direct questioning. The present study is limited to a consideration of the findings from the use of the paired comparison method. The instructions for the mimeographed sheets filled out by each child read as follows:

"This is an experimental study of group attitudes. You are asked merely to underline the one of each pair with whom you would rather associate. For example, the first pair is:

Englishman - South American

If, in general, you prefer to associate with Englishmen rather than with South American, underline Englishman. If you prefer, in general, to associate with South Americans, underline South American. If you find it difficult to decide for any pair simply underline one of them anyway. Be sure to underline one of each pair even if you have to guess."

The nations and races included are: American, Armenian, Chinaman, Englishman, Frenchman, German, Greek, Hindu, Irishman, Italian, Japanese, Jew, Mexican, Negro, Pole, Protestant, Russian, Scotchman, Spaniard, South American, Swede, Turk, and Catholic.

To the list of the 21 nations and races included by Thurstone in his study of 239 college students were added Catholic and Protestant. These were paired only with each other and with Jew. Each child was thus confronted with the problem of making 212 judgments about 212 pairs included on the mimeographed sheet. The validity and reliability of Paired Comparison data considered as psychophysical method has been adequately considered by Thurstone (16), Guilford (6), and Saffir (15). The 21 repetitions included by Thurstone for the purpose of statistical verification were, therefore, not included. The scale values for each nationality or race determined by the method of comparative judgment indicate rank order and also distance in comparable units. The preferred group in this method is given a scale value of zero. Distance from this most preferred point is indicated in terms of sigma values. The scale values for the following groups are given in Table I; 1265 public school children, 503 Sunday School children, 364 colored children, 246 rural children, and 44 private school children. Scale values for children from the various economic levels and religious groups will be presented later as part of comparative studies made. Only the preferences on the 21 nationalities and races making a total of 210 judgments are reported in this paper.

Table I

SCALE VALUES OF 21 NATIONS AND RACES IN FIVE GROUPS OF CHILDREN

Nation or Race	1265 Public School Children	503 Sunday School Children	364 Colored Children	246 Rural Children	44 Private School Children
American	0.0000	0.0000	0.4436	0.0000	0.0000
English	0.6840	0.8861	1.0306	1.1217	0.8936
French	1.2051	1.2946	1.6181	1.5837	1.1775
Irish	1.3668	1.6154	2.2743	1.9189	1.5568
German	1.8540	2.0772	2.3710	1.2026	2.9973
Spanish	1.8922	2.1183	1.9104	2.2946	2.2155
Scotch	1.9438	1.9358	2.3005	2.3254	0.9319
S. American	1.9794	1.7882	1.6223	1.8597	2.8446
Italian	1.9983	2.3947	2.1736	2.2746	2.5017
Swede	2.0769	2.3383	2.6960	2.7712	1.9875
Mexican	2.1381	2.6652	1.6935	2.7456	2.1920
Russian	2.4088	3.0145	2.6114	3.2925	3.0991
Jew	2.5438	1.9374	2.8574	2.9121	2.8965
Pole	2.7720	3.0069	3.3730	3.2835	3.1656
Greek	2.8977	2.9251	3.0353	3.2276	2.5158
Armenian	2.8983	2.8659	2.7679	3.0735	3.3630
Japanese	2.9263	3.2025	2.2938	3.1589	3.3793
Chinaman	3.1490	3.5320	2.6141	3.1785	3.4679
Turk	3.4833	3.5979	3.3777	4.1397	3.8435
Negro	3.6841	3.5881	0.0000	2.8454	3.4860
Hindu	3.7440	3.8630	3.7832	4.0250	4.0426

PREFERENCES OF ADULTS AND CHILDREN

The order of preference for nations and races expressed by adults has been found to be strikingly similar. Whatever the determiners for preferences are the results of many studies show a surprising constancy. Characteristic of the reaction of social psychologists to this fact is that made by Allport (1, p. 816) in commenting on the results of Thurstone's study of a limited population. "With but few local variations," says he, "The 'social distance' with which different racial groups are regarded is the same from coast to coast." Guilford in his study of 1000 college students located in various parts

of the United States found that "100 representative subjects would have been amply sufficient from each university to secure an adequate sampling of student opinion on the question of racial preference." (6, p. 183). Are children's preferences that consistent? To answer this question let us compare the results on our 2422 children with the sigma values found by Thurstone in his study of 239 university students. In Table II these are indicated along with the scale values on all the children subjects, first with, and then without, the 364 negro children.

Table II
PREFERENCES OF ADULTS AND CHILDREN

Nation or Race	2422 Children	2058 White Children	Thurstone's 239 College Students
American	0.0000	0.0000	0.0000
Englishman	0.7445	0.8303	1.3413
Frenchman	1.3756	1.3634	2.4651
Irishman	1.6462	1.5675	2.1821
German	1.8396	1.7669	2.5570
S. American	1.9926	2.0391	3.6415
Spaniard	2.0751	2.0927	3.7936
Scotchman	2.0798	2.0194	2.0962
Italian	2.2550	2.2391	3.6684
Mexican	2.3772	2.4493	5.1018
Swede	2.3832	2.2989	2.9079
Jew	2.8136	2.7669	3.9207
Russian	2.8401	2.8119	4.1010
Armenian	3.0565	3.0192	4.6824
Greek	3.1157	3.0474	4.6232
Japanese	3.1426	3.1910	4.9396
Pole	3.2259	3.1051	4.4185
Negro	3.3118	3.7382	5.8686
Chinese	3.3346	3.3441	5.3055
Turk	3.7945	3.7664	5.8297
Hindu	4.0765	3.9821	5.3429

What are the similarities and differences in the preferences expressed by adults and children? In the rough, the order of preferences seem more similar than different. Americans rate first and English second. But the distance between American and English is larger for adults than children (1.34 for adults and .83 for children). The negro is ranked lowest by adults with the Turk next to last and Hindu above the Turk. The children placed the Hindu last, the Turk next to last and negro above that. With the colored

children included the negro tops the Chinaman. Other differences are: the Irish are rated higher than Scotch by children but adults rate the Scotch after the English though they distance him from the English fairly much. Swedes are ranked higher by adults than by children (seventh instead of tenth). The Mexican is ranked tenth by children and seventeenth by adults. The Pole ranked twelfth by adults is ranked sixteenth by children. Italians top Spaniards as ranked by adults whereas the children reverse the order. South Americans are ranked somewhat higher by children. One of the most striking differences is the significantly larger spread in distance among adults as compared to the spread in children. A sigma value of 5.86 describes the range from the most preferred to the least preferred in adults. The comparable value for children, with 364 colored included, is 4.0765, with them excluded, it is 3.9821. A smaller variability is interpreted by Thurstone as an index of greater tolerance, or as an index of international mindedness. Guilford thinks the chief determining factor of variability is heterogeneity. In the light of the differences found between the children and adults and the differences in the various groups of children which are to be reported later a significant factor contributing towards a smaller variability is relative undifferentiation. This means the direction of the prejudices being developed in children is there but the "distances" between nations and races they like, are indifferent to or dislike, are not as well marked, as in adults. The children, that is, are not as markedly discriminating in their preferences as are the adults, not because they have, on the basis of study and observation, educated themselves to be human, tolerant, international, but largely because they have not yet acquired the full force of the prejudices and biases which are a part of their climate of opinion.

These conclusions seem warranted on the basis of the differences in the sigma values. Strong reinforcing evidence pointing in the same direction is the smaller degree in the community of opinion found in children. With but one exception Guilford reports intercorrelations ranging from .975 to .991 for six universities he studied. The exception is New York University where correlations ranged from .843 to .894. Cosmopolitanism and Jewish parentage are the local factors which Dr. Guilford gives as the explanation for this difference. The intercorrelations in the groups of children studied range from .595 to .945. The correlation of .595 is between white and colored children. The reason is apparent from the data presented in Tables I and II. The negro ranked third from last by all (2058) white children examined and second from last by 1265 public school children, scaled as indicated in Table I, is placed first by the colored. Other marked differences in the scale values of negro and white children also appear. Intercorrelation of Jew with Catholic is .775 and with Protestant is .755. The reason for these relatively low correlations appears in Table V. The chief reason is of course the fact that the Jewish children rank themselves first rather than

near the middle. Other intercorrelations obtained range from .842 to .945. The correlation between values of the low economic level children and middle class children is .945, with high economic level is .842; between middle class and high is .861. Values of rural children correlate .889 with city children. The lower correlations found in children are to be expected for two reasons. First, because the children were selected to represent well-defined groups. Second, because of their relative undifferentiation in their preferences as compared with adults.

Do children favor Fascist, Communistic, or democratic countries? Obviously they are strongly Pro-English. They prefer French to Germans. French ranked third, Germans fifth, Italians ninth, Russians thirteenth, Japanese seventeenth, and Chinese eighteenth. Since the distances are expressed in sigma values it may be legitimate to compare average values for national combinations that appear as European possibilities today. So doing we get the following results. Low value, of course, indicates direction of preference.

English plus French equals 1.096

Italian plus German equals 2.002

English plus French plus Russian equals 1.668

Italian plus German plus Japanese equals 2.398.

That the American children favor an English and French combination rather than Italian and German; and that they favor an English, French and Russian combination to an Italian, German, and Japanese combination is apparent. Considered in terms of their nationality preferences, then, American children are not Fascist minded.

RACIAL DIFFERENCES

How the nationality and race preferences of negro children differ from the preferences of white can best be judged by comparing the values of the 364 negro children selected from the most representative colored school in St. Louis⁸ with the 1265 public school children selected to represent low, middle, and high economic levels. The values for both groups are shown in Table I. The distances are graphically presented in Figure 1. Justifiably enough the colored children place the negro first, the distance between the American and Englishman is thus somewhat narrowed, the Frenchman follows the Englishman but is 1.6018 sigma from zero value as

8. In interpreting these results it is well to remember that in St. Louis negro children do not attend school with white children and that the educational setting in St. Louis is Southern in "atmospheric" effect.

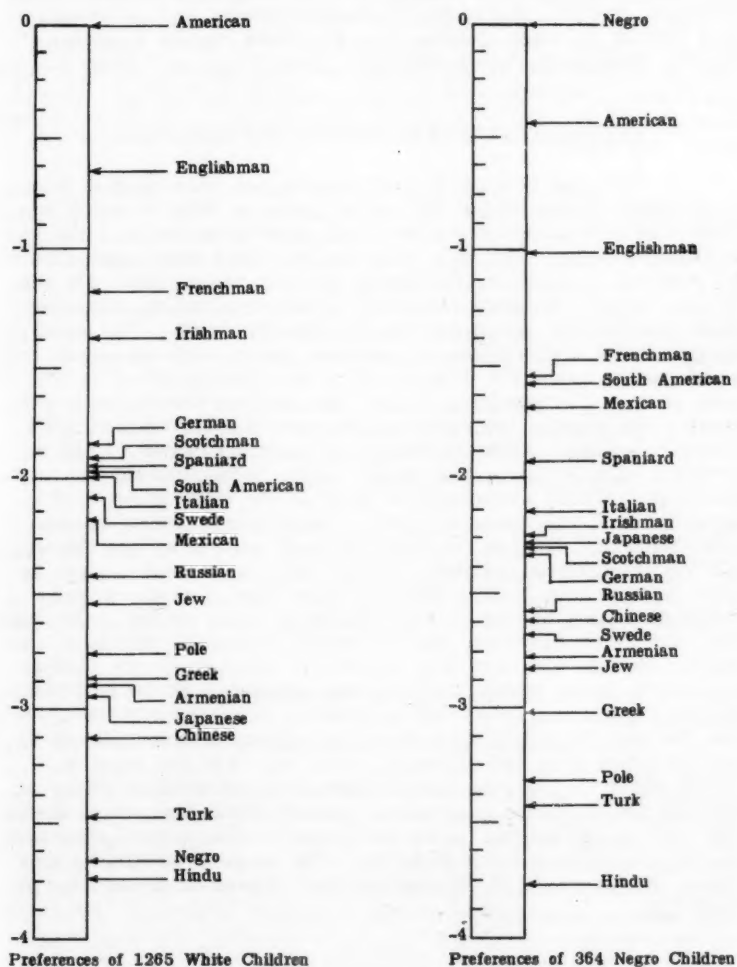


Figure 1. Racial Differences in Nationality Preferences of Children.

against 1.205 in the white children. Striking is the difference in expressed preferences for South Americans and Mexicans. Nations and races more favored by negro children than by white are South American, Mexican, Spaniard, Japanese, Chinese, and Armenian. Less favored by negro children than by white are the Irishman, German, Scotchman, Swede, Russian, Jew, Greek, and Pole.

COMMUNITY (RURAL-URBAN) DIFFERENCES

Since the 364 rural children examined were selected from public school classes within the range grades of fifth to eighth inclusive the best group to compare them with is again the 1265 public school children. The scale value for the rural and urban children are reported in Table I. Differences between these groups are very striking indeed. Children from two of five rural schools examined placed the German second and the Englishman third. The sigma distance between the preferred American position and the second preferred position given the Englishman is significantly larger in the rural group. The clustering of the other nations are markedly different. Consistently the rural children have a more marked 100% American pattern. Their variability is markedly larger (4.139 as compared with 3.744). The largest sigma value between the most and least preferred nationality is found in one rural group. The sigma value of this group is 4.507. Rural children then as compared with city children are markedly more American, less tolerant and less international minded. Nations and races more favored by rural children than by city children, other than Germans already mentioned largely due to German descent of many of the rural children, are South American, Italian, Negro, Armenian, Japanese, and Hindu. Nations and races less favored by rural than city children are French, Irish, Scotch, Swede, Pole, Russian, and Turk. In the rural school that is located in what is known as a Klan district the Jew is ranked third from the bottom, a rank order of 19, and the negro is ranked fifteenth. The fact that the negro is ranked above the Japanese and Chinese does not so much imply a tolerance for the negro as it does a greater dislike for groups identified with the stereotype "damn foreigners." This is the group that has the large sigma value of 4.507. The scale of nationality preferences for the group of 60 children from this school is indicated in Table III.

ECONOMIC DIFFERENCES

For the purpose of discovering if there are differences in nationality preferences that are influenced by the economic factor, the reactions of 320 children from two schools located in the slum district were compared with 769 children from three schools in middle

Table III

SCALE OF NATIONALITY PREFERENCES FOR KLAN
DISTRICT SCHOOL

Nation or Race	60 Children from Klan District
American	0.0000
English	1.2727
German	1.7429
French	1.7901
South American	2.0894
Irish	2.2960
Spaniard	2.7929
Italian	2.9092
Swede	2.9304
Scotch	3.1088
Mexican	3.1229
Russian	3.2872
Armenian	3.3414
Greek	3.5343
Negro	3.6196
Japanese	3.6995
Chinese	3.6995
Pole	3.9238
Jew	4.1381
Turk	4.4568
Hindu	4.5071

class neighborhoods and 176 children from a public school in a well-to-do neighborhood.⁹ The scale values for the three groups are shown in Table IV and are graphically presented in Figure 2.

No striking or unexpected differences appear. The differences that are found seem largely to be determined by descent. For example in the poor district live more Irish, Italians, and Poles, and, therefore, these nations are more preferred by children from this district. The negro is ranked last by the poor children whereas he is ranked next to last by children from the other economic levels.¹⁰

9. For details about neighborhood indices the writer is indebted to Mr. Irving Weissman of the Department of Research in the St. Louis Social Planning Council. For details of indices used see Meltzer (11).

10. These results probably characterize only white children from low economic levels who live in or near negro areas but who because of "Southern" bias in the educational system do not attend the

Table IV

SCALE VALUES FOR CHILDREN FROM THREE ECONOMIC LEVELS

Nation or Race	320 Poor Children	769 Middle Class Children	176 Rich Children
American	0.0000	0.0000	0.0000
English	0.6801	0.7334	0.6386
French	1.4036	1.1801	1.0327
Irish	1.3347	1.2731	1.4926
Jew	3.0564	2.9101	1.6678
Scotch	2.2395	1.7819	1.8101
Spaniard	1.9598	1.8435	1.8732
Swede	2.2903	1.9095	2.0310
South American	1.8862	1.9885	2.0634
Mexican	2.1080	2.2209	2.0853
Italian	1.5820	3.1356	2.2773
Russian	2.2816	2.5896	2.3553
German	1.4884	1.5211	2.5526
Japanese	3.1480	2.8971	2.7339
Pole	2.3054	3.1055	2.9052
Greek	2.8896	2.7221	3.0815
Chinese	3.3206	3.0034	3.1231
Armenian	2.7713	2.6483	3.2752
Turk	3.3466	3.5593	3.5439
Negro	3.8312	3.6743	3.5469
Hindu	3.5818	3.7649	3.8853

The difference found in the children from the high economic level is largely due to the relatively large Jewish population attending the school examined. The Jew is ranked fifth instead of sixteenth and the German fifteenth instead of fifth.

RELIGIOUS DIFFERENCES

Religious differences in nationality preferences were studied by comparing the scale values of 144 children from a Reformed Jewish Sunday School with 91 children from a Catholic Parochial school and 268 children from three Protestant Sunday Schools (one liberal, two fairly fundamentalistic). The scale values for these groups are

(Footnote continued) same schools. It is doubtful if this difference would appear in poor children living in cities with a "Northern" bias in the educational set-up.

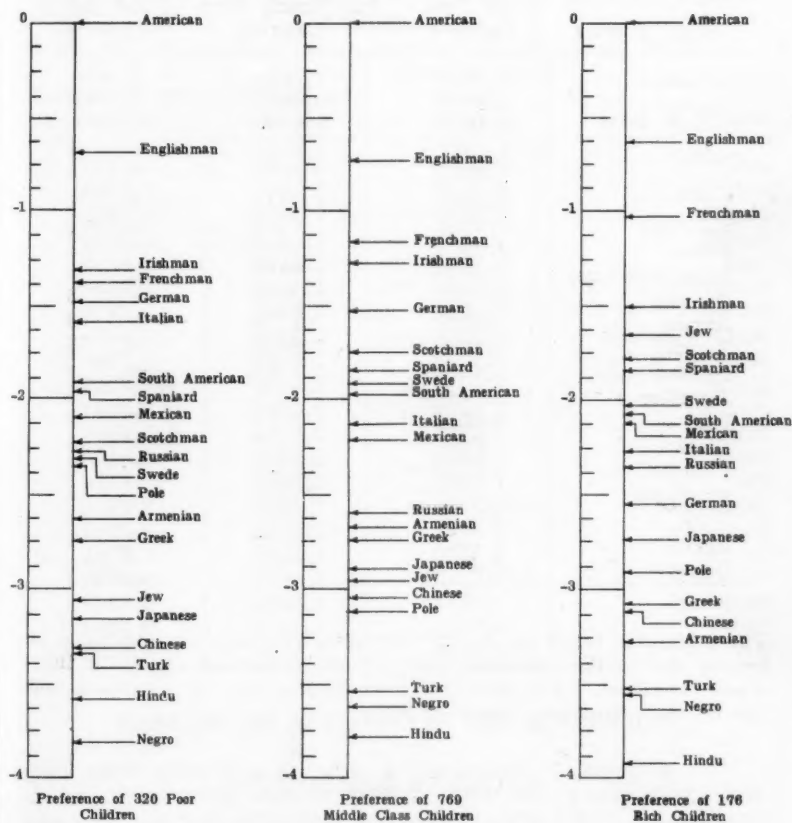


Figure 2. Economic Differences in Nationality Preferences of Children.

indicated in Table V and graphically presented in Figure 3.

Table V

PREFERENCES OF JEWISH, CATHOLIC, AND PROTESTANT CHILDREN

Nations or Race	144 Reformed Jewish Children	91 Catholic Children	268 Protestant Children
Jew	0.0000	2.8498	3.0742
American	0.1118	0.0000	0.0000
English	0.7836	1.1965	0.7901
French	1.1186	1.3812	1.4959
Irish	1.7744	1.4898	1.6938
Scotch	2.0658	1.9184	1.9350
Swede	2.1135	2.6255	2.3877
South American	2.1241	1.3206	2.0318
Spaniard	2.2752	2.0122	2.1790
Italian	2.4914	2.1539	2.6506
Mexican	2.4992	3.0083	2.6001
Russian	2.6187	3.5399	2.9968
Greek	3.0354	2.8417	3.0102
Pole	3.1657	2.5490	3.4179
Japanese	3.2193	3.4560	3.0441
Armenian	3.2984	2.3135	2.0949
German	3.3540	1.3805	1.6091
Chinese	3.5348	3.8972	3.2780
Turk	3.5913	3.5900	3.7242
Negro	3.7115	3.4553	3.7094
Hindu	3.8933	3.8720	3.9356

TOLERANCE AND NATIONALISM IN CHILDREN

According to Thurstone "A wide range of scale values indicates rather strong and rather uniform national preferences. An internationally minded group would give proportions hovering more closely about .50 and hence the scale separations would be, on the whole smaller than the scale separations for a prejudiced group." Guilford argues that the chief factor determining variability is the heterogeneity of the group. All in all we have about 13 well-defined groups of children. How do they compare in variability and to what extent do the differences in variability agree with known social facts about the tolerance of the various groups? In Table VI the sigma values of the various groups are presented in order beginning with the group which has the greatest variability.

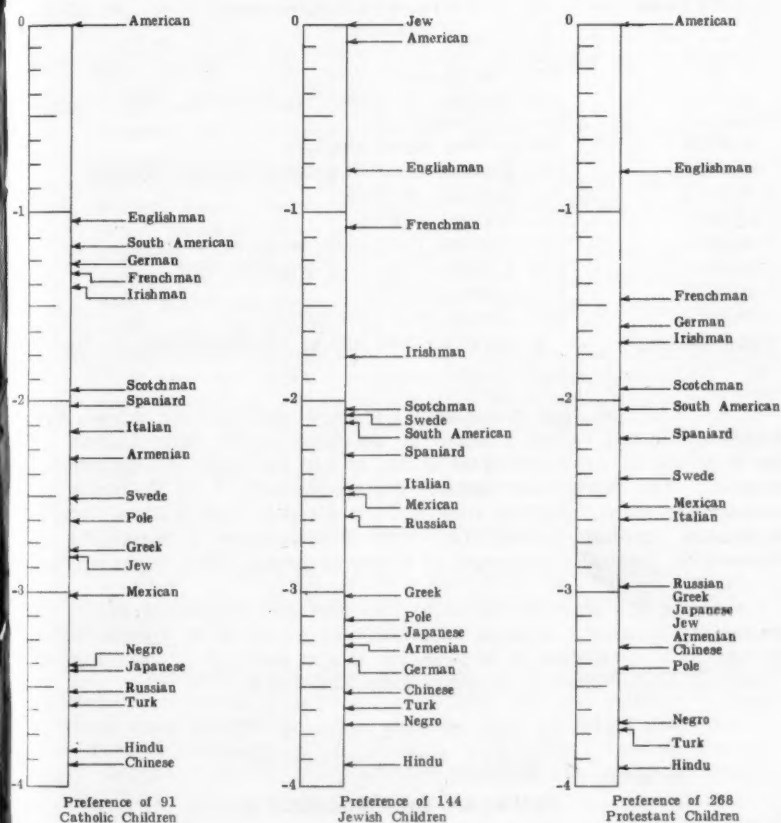


Figure 3. Religious Differences in Nationality Preferences of Children.

Table VI

**VARIABILITY AND TOLERANCE IN NATIONAL
PREFERENCES OF CHILDREN**

Sigma Values	Group Identifications
4.5763	41 children from Lutheran Sunday School
4.5071	60 children from Klan district public school
4.1443	70 children from Baptist Orphans' Home
4.1397	246 rural children
4.0426	44 private school children
3.9356	268 children from Protestant Sunday Schools
3.8972	91 Catholic children
3.8933	144 Jewish children
3.8853	176 children from high economic level
3.8312	320 children from low economic level
3.7832	364 colored children
3.7649	769 middle class children
3.3053	79 children from liberal Congregational S. S.

Children from the liberal Congregational Sunday School, the middle class and colored children in the order named score highest for tolerance of nationalities or races, or are the most international minded. The three least tolerant groups studied are in the order named Lutherans, children from a Klan district, and children from a Baptist Orphans' Home. The order of differences in variability agree with general impressions of informed people about the groups.

In the light of the facts presented here, it seems safe enough to consider a smaller variability as an index of greater tolerance, but in children it is tolerance in the sense of a weaker nationalism rather than a conscious internationalism.

SUMMARY AND CONCLUSIONS

SUMMARY OF PROCEDURE

The preferences of 2422 American children for 21 nationalities and races were obtained by the use of the Method of Paired Comparisons. The children selected represented well-defined economic, social, or religious groups. Each was confronted with the need of making 210 judgments about that number of paired comparisons. The results treated by the Law of Comparative Judgment yield rank orders and also show distance in comparable units.

SUMMARY OF FINDINGS

- I. General Characteristics of Nationality Preferences in American Children.
 1. Are markedly Pro-English.
 2. Do not favor possible Fascist combination of nations. Prefer French and English to German and Italian combinations. Prefer French, English, and Russian combination to German, Italian, and Japanese combination.
 3. The most preferred nations in order of rank are: American, English, French, Irish, German, Scotch, South American, Spaniard, Italian, Swede.
 4. The least preferred nations or races from lowest up are: Hindu, Turk, Negro, Chinaman, Japanese, Pole, Greek, Armenian, Russian, Jew, and Mexican.
 5. Children rate the Irishman higher than the Scotchman whom adults rate higher. Swedes are rated higher by adults, Mexican, higher by children. Italians rated above Spaniards by adults are rated below by children.
 6. Children are more tolerant and less nationalistic than adults. This does not imply a conscious international mindedness. It does mean their attitudes are more undifferentiated and that they are, therefore, less discriminating; prejudiced to a lesser degree than the prevailing climate of opinion which surrounds and influences them.

RACE DIFFERENCES

Some of the more striking or interesting race differences found by comparing the results of 364 colored children with 1265 white children are:

Colored children place the negro first and as a result their distance between the American and Englishman is smaller. Nations or races more favored by negro children than by white are South American, Mexican, Spaniard, Chinese, Armenian. Less favored by negro children than by white are the Irishman, German, Scotchman, Swede, Russian, Jew, Greek, and Pole.

COMMUNITY (RURAL-URBAN) DIFFERENCES

Consistently rural children have a more marked 100% American pattern. They are less tolerant and more nationalistic than city children. Nations more favored by rural than city children are German, South American, Italian, Negro, Armenian, Japanese, and Hindu. Less favored by rural than city children are French, Irish, Scotch, Swede, Pole, Russian, and Turk.

These conclusions are based on a comparative study of 364 rural and 1265 city children.

ECONOMIC DIFFERENCES (PREFERENCES OF RICH, POOR AND MIDDLE CLASS CHILDREN)

Economic differences were studied by comparing the values of 320 children from a very poor neighborhood with 769 children from a middle class neighborhood and 176 children from a high economic level. The middle class children are relatively the most tolerant and the rich children the least tolerant. The specific differences in the relative rank orders appear to be chiefly determined by ancestry. For example in the poor district live more Irish, Poles, and Italians, and as a consequence these nations are more preferred by children from the district. Again more Jews live in the richer district, and as a consequence the Jew is ranked fifth instead of sixteenth and the German fifteenth instead of fifth. The negro is ranked last by the poor children whereas he is ranked next to last by the other groups of children.

RELIGIOUS DIFFERENCES

Religious differences in nationality preferences were studied by comparing the scale values of 144 children from a Reformed Jewish Sunday School, with 91 children from a Catholic Parochial school and 268 children from three Protestant Sunday Schools. Jewish children place their own group first but the distance between the second choice (American) and third (Englishman) is so relatively small that the sigma value for their third ranking nation is smaller than is the second as rated by Protestant children who in turn distance Americans from the English less than do the Catholic children. More favored by Catholic Children are the South American, Pole, and Negro. Less favored by them are the Mexicans, Russian, Chinese. Most of these differences correlate with recent religious and political events in these countries.

TOLERANCE AND NATIONALISM IN CHILDREN

Of 13 well-defined groups of children studied the most liberal in order named are: children from a liberal Congregational Sunday School, middle class children, and colored children. The most nationalistic groups studied in order named are children from a Lutheran Sunday School, school children from a rural K.K.K. neighborhood, children from a Baptist orphans' home, and rural children. These conclusions are based on the assumption that a wide scale of values indicates strong nationalism and a narrow range of sigma values indicates tolerance, discussed in the paper proper.

SOME GENERAL CONCLUSIONS

The climate of opinion in family and neighborhood seem to be the chief contributing factors which determine the direction and distance of race and nationality preferences expressed by the various groups of children studied. Children of negro parentage give the negro the most preferred position. Children of Jewish parentage rank the Jew first. In neighborhoods inhabited by more Italians, Poles, or Germans these nations are ranked higher. In schools where the Jewish population is large the German is ranked low. In a K.K.K. district the Jew is ranked near bottom and the negro ahead of nations and races which strong nationalists often classify in that waste basket category for "undesirable" nations or races—"damned foreigners." Rural children are more markedly nationalistic in their preferences than city children. The clustering and variability of nations and races on a scale seemed to be determined by the interplay of family, neighborhood, and national "stereotypes." The neighborhood pattern is the national with local variations, and the family pattern is the neighborhood pattern modified by the ancestry of the parents—particularly in minority groups.

The paired comparison method appears to be a valuable instrument for measuring nationality preferences in children as well as adults. The lower intercorrelations between groups of children than in adults is due to two known factors—the greater heterogeneity of the groups of children studied and the greater undifferentiation of the children's responses. Also entailed is a probable statistical problem which seems deserving of further study, namely the effect on the correlation of the vast difference in the ranking of a minority group when made by a child derived from such a group. For example, in the negro children there is a difference in rank of 18 or 19 out of 21 possibilities brought about by the fact that white children rank the negro eighteenth or nineteenth, whereas negro children rank the negro first. This difference can legitimately enough be considered as an aspect of heterogeneity. Can a small variability—a small range of sigma values—in the light of these facts be considered a measure of tolerance or international mindedness for minority as well as majority groups, or can other statistical methods be used which would more clearly reveal the meaning of the differences found?

Advantageous as the paired comparison method may be statistically, there are definite facts and insights it cannot reveal. By its use cannot be obtained facts about the intensity of feeling reactions, facts about concepts and stereotypes, about real reasons and good ones, about rationalizations and insights. To obtain such facts more individual and clinical methods including the method of intensive interviewing is necessary. The paired comparison method is more adapted for use in discovering the more cultural determinants rather than the more personal or individual determinants. The significance

These conclusions are based on a comparative study of 364 rural and 1265 city children.

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Advantageous as the paired comparison method may be statistically, there are definite facts and insights it cannot reveal. By its use cannot be obtained facts about the intensity of feeling reactions, facts about concepts and stereotypes, about real reasons and good ones, about rationalizations and insights. To obtain such facts more individual and clinical methods including the method of intensive interviewing is necessary. The paired comparison method is more adapted for use in discovering the more cultural determinants rather than the more personal or individual determinants. The significance

of nationality and race attitudes as a social problem warrants further research by the use of supplementary methods.

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REVIEW

GROUP ADJUSTMENT: A STUDY IN EXPERIMENTAL SOCIOLOGY by Wilber I. Newstetter, Marc J. Feldstein, and Theodore M. Newcomb. Cleveland: School of Applied Social Sciences, Western Reserve University, 1938. Pp. xv+154.

This volume, though just published, summarizes the results of research material collected during 1930 and 1933. These dates are of particular interest in connection with the chapters based upon the "personal preference technique" and "behavior observations" in relation to social interactions, for they are contemporaneous with the period during which Moreno was gathering material for the publication (Who Shall Survive?) that brought sociometry into the field of consciousness of social psychologists. As the experimental data of Newstetter, Feldstein, and Newcomb are also sociometric in orientation, and were secured through methods envisaged before Moreno's work was known to them, it seems worth while to examine the two approaches comparatively.

Both Moreno and the present authors made use of situations in which fairly homogeneous groups of young people were living together in a controlled community. The fact that the main scene of Moreno's work was an industrial school for delinquent girls, and that the present "group adjustment" study grew mainly out of "Wawokiye," a summer camp for problem boys, is a difference in detail that probably need not loom large in an evaluation.

Moreno coined the term, "social atom," and saw the individual in terms of the patterns of attractions and repulsions which he directed toward and aroused in other individuals of the community. The main criteria from which these social atoms were structured and diagrammed were the expressed preferences as to the several persons with whom each individual wished to study, work, or live "in proximity." These choices were made the basis, so far as possible, for actual assignments and readjustments in the community life.

At Wawokiye, an "index of group status" was arrived at through summing the mentions received by each boy from the other campers during confidential interviews for ascertaining five choices as to "most desirable" tent-mates. As in Moreno's technique, the choices were given real-life significance by making them the basis for occasional replacements of individuals. Diagrams showing uni-lateral, mutual, and non-mutual attractions were worked out (Chapter XII) somewhat in the manner of Moreno.

Though Moreno occasionally "quantified" his data by noting the number of positive or negative "tele" responses which a given individual inspired, he appeared to be less interested in single scores than in idiomatic structures of personal relationship, the "networks" of attraction that could be traced from person to person and the changes in social structures corresponding to normal developmental processes, to sex and race composition of groups, etc.

The Wawokiye study, on the other hand, scarcely touched except by implication upon the intricacies of social structure which the preference technique could be made to yield. But through the very simplicity of the "group status" index, the study opened itself for a determination of data reliability through orthodox statistical methods (e.g., the "split-half" correlation technique which gave a value close to .90 when the pool of four consecutive experiments was used). The group status index also provided individual scores that could be considered in connection with other quantified measures of the campers: age, mental age, and I.Q.; "group acceptance" as rated at weekly intervals by the six tent counsellors; "compresence" in groups of fellow campers as established by systematic sampling of every boy's activities; "cordiality" given and received, ascendance-submission, volubility of expression, and attention-to-counsellors as coded from diary observations. Significant relationships showed up between index of group status and ratings or observational measures which were in truth facets of the same thing—group acceptance and "cordiality received"—and between mutual preferences expressed and "compresence" in small groups. But, as Newcomb has pointed out in his excellent chapter on measuring aspects of interaction, the attempt to find explanations of the individual's group status through his behavior traits yielded few positive results beyond methodological ones. (The correlation of about .50 between volubility and cordiality received may be significant, although the sampling error is not presented.)

This same chapter contains a most provocative comparison of the reliability of a "social stimulus" observation—cordiality received, and a "trait" observation—cordiality given. Depending on the technique used for scaling, the former had a reliability of about .80 to .90, the latter much lower. It was concluded that this was because the cordiality given scores differ only slightly for different individuals, and that there is reason to doubt the validity of such a concept as "tendency to accept the entire group." The reviewer would like to raise the question, however, as to whether cordiality given might prove, through further analysis of the data, to be a consistent and definitive trait in some individuals, even though the cordiality given of most individuals may be largely situation-determined.

The book opens with a discussion of "group work and its problems," and ends with a chapter on "implications for group work." These contain ideas of value if one has patience to sort them out from the diffuseness in which they are couched, but do not articulate especially well with the experimental findings.

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CITYWARD MIGRATION: SWEDISH DATA, by Jane Moore, Chicago, The University of Chicago Press, 1938. Pp. xix+140.

The author's problem is suggested by E. G. Ravenstein's "laws of migration" in which is posited the thesis that internal migration proceeds by stages from rural areas toward urban centers by way of smaller urban centers or towns. The need for this gradual adaptation to new environments in the process of migration is also stated by T. J. Woofar, Jr., Sorokin, Zimmerman and Galpin.

The first part of the study deals with the process of migration to Stockholm, Sweden. (Statistical material made available by compulsory registration led the author to make her study in this country.) The conclusion drawn from this data is that persons migrate from agricultural areas to the city by way of towns. This hypothesis is further established by the second part of the book which compares the occupation and income, civil status, and education of persons residing in Stockholm in order to show how they differed according to the type of community of birth. Since these persons retained the old behavior patterns it could be safely assumed that movement from farm to town would entail less difficulty in adjustment than movement from farm to city.

Cityward Migration contributes toward the understanding of migration by showing that the push from the rural community and the pull toward the urban center can be accounted for in terms of step-by-step movement between closely resembling communities and that behavior patterns are a "means of migration" "as truly helpful to transportation to a city as a railroad ticket." It is important to establish the influence of "patterns of behavior," "resembling material environments" and "community of birth" because this prepares the ground for complementary sociometric studies. "Push" and "pull" can be further broken down in terms of the "sociometric environment" as well as the material environment or "degrees of industrial development." Push away from a locality may be due to rejection, i.e., loss of parents, of a sweetheart, of prestige and honor, or racial, political, and religious persecutions. Pull toward a new locality may be due to attraction, i.e., a relation or friend living in another locality, a girl who is there, or a desire for anonymity. Sociometric testing of migration would indicate the networks of inter-personal relations by means of which actual individuals move.

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REPORTS OF SOCIOMETRIC WORK

THE WESTFIELD STATE FARMS, REFORMATORY DIVISION, DEPARTMENT OF CORRECTION, BEDFORD, NEW YORK.

Placement of new inmates from the receiving station cottages is being done on the basis of sociometric findings. Group psychotherapy is administered in the cottages. The reformatory has a population of 231 women.

K. Roberts

NEW YORK STATE TRAINING SCHOOL FOR GIRLS, HUDSON, NEW YORK.

The assignment of a new girl to a housemother and to a girl representative of the cottage is made by a sociometric test. The girl representative is selected from the sociogram of the group in each cottage, for which position she is eligible if she has shown an integrated position in that group for a minimum of six months.

Choice of tablemates is tested every eight weeks. Findings are put into operation on the basis of giving every girl optimum satisfaction by using the highest choice which meets reciprocation. An unchosen girl has her first choice satisfied.

H. H. Jennings

SOCIOMETRIC FIELDWORK, DIVISION OF FARM POPULATION AND RURAL LIFE, DEPARTMENT OF AGRICULTURE, WASH- INGTON, D.C.

This work is under the charge of Dr. Chas. P. Loomis, senior agricultural economist, and his staff of fieldworkers. The following is a summary of the location of communities studied and the number of families interviewed in each:

Community	State	Number of Families in Community at Time of Survey	Number of Families Interviewed
RESETTLEMENT COMMUNITIES			
Ashwood	South Carolina	63	63
Bosque	New Mexico	42	42
Cumberland Homesteads	Tennessee	200	184
Cumberland Farms	Alabama	225	127
Dyess	Arkansas	484	415
Penderlea	North Carolina	110	49
Ropesville	Texas	32	32
Total		1156	912
IRRIGATION-RECLAMATION			
Klamath Falls	California-Oregon	?	84
ESTABLISHED COMMUNITIES			
Tortugas	New Mexico	100	33
South Holland	Illinois	600	443
Total		700	476
PROJECTED			
An Indian Village	New Mexico	200-300	
A Spanish-American Village	New Mexico	200-300	
Grand Total Interviewed			1472

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